

GOVERNMENT OF INDIA
PLANNING COMMISSION



REVIEW
OF
THE FIRST FIVE YEAR PLAN

MAY, 1957

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Explanatory Note

The expressions 'lakh' and 'crore' signify 100,000 and 10,000,000 respectively.

REVIEW OF THE FIRST FIVE YEAR PLAN

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INTRODUCTION

Since the commencement of the First Five Year Plan the Planning Commission has published a series of progress reports on the working of the Plan. The first progress report related to 1951-52 and 1952-53. This was followed by a review of the working of the Plan during its first two years and a half ending September, 1953. Three further progress reports were published. These were for the year 1953-54, for the six months April—September 1954, and for the year 1954-55.

A year ago, in presenting the progress report for 1954-55, I said:

“After the Second Five Year Plan has been approved, the Planning Commission hopes to undertake a careful assessment of the working of the First Five Year Plan as a whole. Such a study over a period of five years will be of value in placing the experience which has been gained during the past five years in the correct perspective and will assist the Central and State Governments in ensuring greater efficiency and securing an even larger measure of public cooperation and participation in the implementation of the Second Five Year Plan.”

This volume attempts an appraisal of the First Five Year Plan as a whole and also includes the Progress Report for the last year of the Plan. In this Review the Planning Commission has endeavoured to make as objective an appraisal as possible of the execution of development programmes in different sectors and to present a balanced account of the results achieved. It is hoped that the Review will assist all concerned in taking such action as may be necessary for ensuring the fulfilment of programmes included in the Second Five Year Plan.

In the preparation of the present report the Planning Commission encountered one difficulty. Owing to the reorganisation of States in November 1956, it has not been possible yet to obtain figures of actual expenditure for States whose territories were reorganised. The figures of expenditure cited for the year 1955-56 are taken mainly from the revised estimates. The estimates of actual outlay during the last year of the Plan are therefore necessarily approximate.

V. T. KRISHNAMACHARI,

Deputy Chairman,
Planning Commission.

May 30, 1957.

CHAPTER I

ECONOMIC TRENDS AND ACHIEVEMENTS

It is proposed to attempt in this chapter an appraisal of the overall economic trends and achievements over the plan period against the objectives and targets defined in the Plan.

OBJECTIVES AND APPROACH

2. The first five year plan had a two-fold objective. Firstly, it aimed at correcting the disequilibrium in the economy caused by the War and the partition of the country. Secondly, it proposed to initiate simultaneously a process of all-round balanced development which would ensure a rising national income and a steady improvement in living standards over a period. While the investment pattern envisaged in the plan was worked out with due regard to the immediate objective and the resources immediately in sight, the approach to the problems of mobilisation and deployment of resources was formulated in the light of the long-term objective. It was also emphasised that the aim was not merely to plan within the existing socio-economic framework but to change this framework progressively and by democratic methods in keeping with the larger ends of policy enunciated in the Constitution. The first five year plan was thus a step in a new direction, a step which involved greater direct responsibility for the State in promoting development and a greater degree of coordination of developmental activity in all economic sectors and at all levels.

3. The economic situation at the commencement of the plan was far from favourable to any marked stepping up of investment. There were acute shortages of food and raw materials. Industrial production was below capacity levels. The transport system had been severely run down. The rehabilitation of large numbers of displaced persons coming over from across the border was a special problem with social, psychological as well as economic implications. The outbreak of the Korean war in June 1950 and an unusually bad crop in 1950-51 had aggravated the situation. In 1951, the country had to import 4.7 million tons of foodgrains. There were inflationary pressures within the economy; the index of wholesale prices at the end of March 1951 was 450 (1939=100). The balance of payments in 1951-52 showed a deficit of Rs. 163 crores on current account. Various developmental projects which had been commenced in the post-war period were faced with financial difficulties. There was little coordination, *inter se*, between the developmental

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programmes of the Centre and of the States, and the administrative machinery in some of the newly constituted States was inadequate even for its normal tasks.

4. The first five year plan, therefore, endeavoured, first of all, to present a coordinated view of the requirements of the economy and of the resources available. In the light of this, it worked out a scheme of priorities in terms of which to proceed further with a view to restoring balance to the economy and of laying simultaneously the foundations of orderly development. To an extent, the plan was an attempt to synthesise and coordinate the development programmes that had already been initiated. But, it would be wrong to minimise the significance of the enunciation of the wider objectives and approaches and of the focussing of public attention on the problems of development as such. Each item of the development programme was viewed as an element in a wider scheme, and new items of work were taken up, some with a view to immediate results; others from more long-range considerations. The first five year plan became, in other words, the starting point of a new and meaningful phase in policy formulation, programming and implementation, and governmental action came to be viewed more and more as an aspect of the community's endeavour to attain defined objectives along lines which, in the circumstances, looked most promising.

5. The following table shows the projected and actual allocation of plan outlay by major heads over the five year period:—

Allocations and Outlay under the First Five Year Plan by Major Heads of Development

	Total Plan Provision (including adjustments)		Outlay 1951-56	
	Rs. crores	Per cent	Rs. crores	Per cent
1. <i>Agriculture and Community Development</i>	354	14.9	299	14.8
(i) <i>Agricultural Programmes</i>	249	10.5	227	11.3
(ii) <i>Community Projects and National Extension Service</i>	90	3.8	57	2.8
(iii) <i>Local Development Works</i>	15	0.6	15	0.7
2. <i>Irrigation and Power</i>	647	27.2	585	29.1
(i) <i>Multipurpose projects</i>	256	10.8	241	12.0
(ii) <i>Irrigation projects</i>	213	9.0	191	9.5
(iii) <i>Power projects</i>	178	7.4	153	7.6
3. <i>Industries and Mining</i>	188	7.9	100	5.0
(i) <i>Village and small-scale industries</i>	49	2.1	44	2.2
(ii) <i>Large-scale industries, mining and scientific research</i>	139	5.8	56	2.8

	Total Plan Provision (including adjustments)		Outlay 1951-55	
	Rs. crores	Per cent	Rs. crores	Per cent
4. <i>Transport and Communications</i>	571	24.0	532	26.4
(i) Railways	267	11.2	267	13.3
(ii) Roads and Road Transport	147	6.2	147	7.3
(iii) Ports and Harbours, Shipping and other Transport	97	4.1	71	3.5
(iv) Posts & Telegraphs, Communications and Broadcasting	60	2.5	47	2.3
5. <i>Social Services</i>	532	22.4	423	21.0
(i) Education	170	7.2	153	7.6
(ii) Health	138	5.8	101	5.0
(iii) Housing	49	2.1	35	1.7
(iv) Labour and Labour Welfare and Welfare of Backward Classes	39	1.6	37	1.8
(v) Rehabilitation	136	5.7	97	4.8
6. <i>Miscellaneous</i>	86	3.6	74	3.7
GRAND TOTAL	2,378	100.0	2,013*	100.0

*Figures for the fifth year are based on 'revised estimates'. Actual outlay over the five year period is estimated at Rs. 1,960 crores.

Despite the shortfalls in expenditure that have occurred under almost all heads, it must be emphasized that public developmental expenditures have been stepped up to remarkably high levels and that in several vital fields like irrigation and power, agricultural improvement, railways and roads, the progress recorded is impressive.

6. The targets of production and other development works enunciated in the Plan have to be related not only to the outlays in the public sector but also to the implementation of certain programmes, in the private sector. An attempt was made in the plan to put together the programmes of development in the organised industrial sector and to assess their impact. The plan indicated for this sector an order of priorities and prescribed the framework of policy within which the relevant programmes were to proceed. The total capital investment required for industrial expansion in the private sector was estimated at Rs. 233 crores; the bulk of this investment being intended for capital goods and producer goods industries. Available data indicate that the progress of investment in the private sector has been up to the initial expectations. Investment in this sector as in the public sector was low in the earlier years but it picked up towards the latter part of the plan period. The rate of investment in organised industries averaged Rs. 26 crores a year for the first two years; in the third year it increased to Rs. 44 crores, in the fourth year to Rs. 50 crores, and in the fifth

year to around Rs. 85 crores. The results of the plan in the industrial field were highly satisfactory not merely in terms of the utilisation of capacity already in existence at the commencement of the plan but also in terms of the new capacity installed in new and important lines. The progress of modernisation and replacement of plant and machinery appears, on the other hand, to have been slower than was expected, the expenditure on this account being estimated at Rs. 110 crores as compared to the plan estimate of Rs. 150 crores.

PRODUCTION TRENDS

7. Judged in relation to its immediate objectives the achievements of the first plan were encouraging. The following table shows the levels of production in important lines at the beginning and at the end of the plan period:

Levels of Production in Selected Lines of Activity: 1950-51 and 1955-56

	1950-51	1955-56	Percentage increase 1951-56
<i>I. Agricultural Production</i>			
(i) Foodgrains (million tons)	50.0	64.8	29.6
(ii) Cotton (Lakh bales)	29.1	40.0	37.5
(iii) Jute (lakh bales)	32.8	42.0	28.0
(iv) Sugarcane (in terms of gur—lakh tons)	56.2	58.6	4.3
(v) Oilseeds (lakh tons)	50.8	56.6	11.4
(vi) Tobacco (lakh tons)	2.57	2.59	0.8
(vii) Tea (million lbs.)	607	668	10.5
(viii) Potatoes (thousand tons)	1634	1839	12.5
<i>II. Industrial Production</i>			
(i) Finished steel (thousand tons)	976	1274	30.5
(ii) Pig iron (thousand tons)	1572	1787	13.7
(iii) Cement (thousand tons)	2689	4592	70.8
(iv) Fertilizers :			
(a) Ammonium Sulphate (thousand tons)	46	394	756.5
(b) Superphosphate (thousand tons)	.55	71	29.1
(v) Locomotives (Nos.)	3	179	..
(vi) Machine Tools—graded (value in Rs. lakhs)	33.64	78.54	133.5
(vii) Diesel Engines (Nos.)	5536	10369	87.3
(viii) Automobiles (Nos.)	16519	25272	53.0
(ix) Cables and Wires—A.C.S.R. Conductors (Tons)	1349	9730	547.1
(x) Aluminium (Tons)	3677	7333	99.4
(xi) Cotton Manufactures			
(a) Yarn (million lbs.)	1179	1633	39.0
(b) Mill Cloth (million yds.)	3718	5102	37.2
(c) Handloom cloth (million yds.)	810	1449	79.0

	1950-51	1955-56	Percentage increase 1951-56
(xii) Jute manufactures (thousand tons) . . .	824	1054	28.0
(xiii) Bicycles (thousands)	101	513	407.9
(xiv) Sewing Machines (thousands)	33	111	236.3
(xv) Electric Lamps (thousands)	15,000	24,228	61.0
(xvi) Power Alcohol (million gallons)	5.0	10.4	108.0
(xvii) Sugar (thousand tons)	1064	1701	59.9
(xviii) Vanaspati (thousand tons)	153	276	80.4
(xix) Paper and paper boards (thousand tons)	114	187	64.0
(xx) Leather footwear (thousand pairs)	5195	5665	9.0
(Western and indigenous types)			

In appendix I at the end of this chapter is given a more detailed statement of the increases in production and in the levels of development in important lines as compared to the targets set forth in the plan.

8. Agricultural production showed striking improvement over the plan period. The output of foodgrains in 1955-56 at 64.8 million tons was about 3 million tons above the target laid down in the plan. The turning point came in 1953-54 with a peak production of 68.8 million tons of foodgrains. This was followed by another good crop in 1954-55 when the foodgrains output was 66.6 million tons. The output of cotton, jute and oilseeds also recorded substantial increases, although there were, as is to be expected, variations from year to year. The index of agricultural production (1949-50=100) rose from 95.6 in 1950-51 to 114.3 in 1953-54 and 116.4 in 1954-55. In 1955-56, however, it recorded some decline. Altogether, the index of agricultural production by the end of the plan period was about 19 per cent higher than at the beginning of the plan.

9. Industrial production also increased steadily, the increase over the five year period being of the order of 40 per cent. Production of mill-made cloth increased from 3718 million yards in 1950-51 to 5102 million yards in 1955-56. The plan target was exceeded by about 400 million yards. In the case of sugar, sewing machines, paper and paper-board and bicycles production reached the anticipated levels; in fact in some cases the targets were surpassed. Cement production rose from 2.7 million tons in 1950-51 to 4.6 million tons in 1955-56, and the general engineering industries as well as heavy chemicals and chemical products recorded sizeable increases in output. The larger availability of raw materials, the utilisation of capacity hitherto un-utilised as well as fresh investment on a significant scale contributed to the general increase in

industrial output. Several new products were manufactured in the country for the first time and a number of new and important industries like petroleum refining, ship building, manufacture of aircrafts, railway wagons, penicillin, ammonium chloride, and DDT were established. In the public sector various industrial units such as the Sindri Fertiliser Factory, the Chittaranjan Locomotive Works, the Indian Telephone Industries and the Integral Coach Factory recorded satisfactory progress. On the other hand, the projected iron and steel plant and the heavy electrical equipment plant could not be commenced in the plan period. The Machine Tool Factory, the Nepa Newsprint Factory and Bihar Superphosphate Factory were also behind schedule.

ECONOMIC OVERHEADS

10. More significant than the increases in agricultural and industrial production mentioned above is the advance made in strengthening the economic overheads on the basis of which further expansion could be undertaken. During the plan period, 16.3 million acres of land were to be brought under irrigation, some 6.3 million acres from major and medium irrigation works and 10 million acres from minor works. Capacity for power generation has been increased from 2.3 million kW to 3.4 million kW. The railway system has been considerably strengthened. As against the plan provision for procurement of 1038 locomotives, 5674 coaches and 49,143 wagons, actual receipts over the five years were 1586 locomotives, 4758 coaches and 61,257 wagons. These were supplemented by an increase in indigenous production—of locomotives from 27 in 1951-52 to 179 in 1955-56, of wagons from 3707 to 14,317 and of coaches from 673 to 1221. Some 430 miles of lines dismantled during the War were restored, 380 miles of new lines constructed and 46 miles of narrow gauge lines converted into meter gauge. The programme for road construction and road transport was also implemented almost completely.

11. The outlay on economic overheads provided for in the plan was no more than enough to sustain the level of economic activity expected by the end of the plan period. The limitations of resources did not permit a building up of these overheads in advance of the emergence of demand. The outlay incurred in the plan period on most of these items was fairly close to the initial targets and the results achieved in physical terms were about 85 to 90 per cent of those envisaged in the plan. Nevertheless, it must be emphasised that the initial provisions themselves were small relatively to the needs of a growing economy. The railway programme was, in

the main, a rehabilitation programme. The development of power was also just sufficient to meet the increasing demand. The first plan paid little attention to the development of mineral resources, and in regard to ports and shipping there was a considerable shortfall in outlay as compared to the initial provisions small as they were.

SOCIAL SERVICES

12. There has been in the plan period a considerable enlargement of social services. In 1950-51 the number of children in primary schools was 18.7 million; by 1955-56 it had increased to 24.8 million—an increase of about 33 per cent. The percentage of children in the age-group 6-11 attending schools was 42 in 1950-51; it increased to 51 in 1955-56. In the age-group 11-14, the corresponding percentage increased from 13.9 to 19.2. For meeting the requirements of trained personnel a number of technical institutions were started in the plan period. The number of persons graduating from engineering and technological institutions rose during the plan period from 2200 to 3700 and of those taking diplomas from 2700 to 4000. Besides, over 14,000 village level workers received training in basic agriculture, cooperation and allied activities in connection with the organisation and expansion of the community projects and national extension work. Training centres were also established for group level workers and these turned out some 1850 supervisory personnel. Training facilities were also established for various small-scale and cottage industries. On the side of health programmes, while the increase in the number of hospital and dispensaries was moderate, a large-scale programme of control of malaria and filaria was executed.

NATIONAL INCOME

13. The overall results of the plan are brought together in the following table showing increases in national income in the aggregate and by major sectors:

Net National Output at 1948-49 prices

							In Rs. abja*
	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56**	Percentage increase of 7 over 2
	1	2	3	4	5	6	7
1. Agriculture, animal husbandry and ancillary activities		43.4	44.4	46.0	46.8	50.3	49.8
2. Mining, manufacturing and small enterprises		14.8	15.2	15.8	16.5	17.0	17.5
							18.2

* abja = 100 crores.

** Preliminary.

	1	2	3	4	6	6	7	8
3. Commerce, transport & communications . . .	16.6	17.3	17.9	18.3	19.1	19.7	18.6	
4. Other services . . .	13.9	14.3	15.0	15.7	16.4	17.2	23.7	
5. Net domestic product at factor cost . . .	88.7	91.2	94.7	100.3	102.8	104.2	17.5	
6. Per capita net output	246.3	250.1	256.6	268.7	271.9	272.1	10.5	
7. Population in crores .	35.932	36.335	36.867	37.328	37.808	38.300	6.6	

14. Over the five years of the plan national income increased by about 17.5 per cent. The net output of agriculture and ancillary fields showed an increase of 14.7 per cent; of mining, manufactures and small enterprises an increase of 18.2 per cent. The increase in commerce, transport and communications was 18.6 per cent and that in other services 23.7 per cent. The net output of agriculture was highest in 1954-55, though the increase from the previous year was nominal. The other sectors have, on the other hand, registered a steady increase. Undoubtedly, the advance in large-scale industries was more rapid than in perhaps any quinquennium earlier, but their total impact on the aggregate national product cannot but be small because of the preponderance of agriculture in the economy. While the rate of increase of national income has on the whole been satisfactory, it has not taken place at a steady pace. It will be noticed that there was a large increase in 1953-54 and 1954-55 as a result mainly of the increase in agricultural output. As much as 13 per cent of the increase in national income was thus registered by the end of the third year; in the two subsequent years, the rate of increase diminished and in fact in 1955-56 the increase was nominal. Per capita incomes over the plan recorded an increase of 10.5 per cent. By the end of the plan period the per capita levels of consumption had probably increased by no more than 8 per cent. In fact, considering the large step-up in developmental outlays and in investment in the last two years of the plan, it is likely that the level of consumption since 1953-54 in per capita terms has shown hardly any rise. The consumption of cereals per adult per day went up from 12.6 ounces in 1950-51 to 14.4 ounces in 1955-56, and of cloth from 9.7 yards per head in 1950-51 (which was exceptionally low) to 16.4 yards in 1955-56; and of sugar from 0.37 ounces per head in 1950-51 to 0.57 ounces in 1955-56. There have been significant increases in the consumption of industrial products like hurricane lanterns, bicycles, sewing machines, electric lamps, radio receivers etc.

INVESTMENT AND OUTPUT

15. The plan envisaged an increase of investment from a level of 5 per cent to about 7 per cent of national income, the target for aggregate investment over the five years being Rs. 3,500—3,600 crores. Investment in the public sector aggregated to about Rs. 1,500 crores, while investment in the private sector was close to Rs. 1,600 crores—a total of Rs. 3,100 crores over the five year period. The level of investment in the economy by the end of the plan period was about double the level in 1950-51. Mention may be made here of the fact that the level of development expenditure in the first two years of the plan was low, and that it was stepped up as from the third year, the step-up being particularly large in the last two years, which accounted for almost two-thirds of the actual outlay over the five year period. This pattern of the growth of public development expenditure was reflected in the pattern of investment. More than 50 per cent of the investment in the public sector materialised in the last two years. Private investment also rose substantially in these years. There were thus two distinct phases in the plan. The first phase in which, apart from the accumulation of inventories in 1951-52 the level of investment, public as well as private, was relatively low, and the second phase in which it rose markedly. The fact that the large increase in output occurred around 1953-54 and the rate of increase slowed down thereafter accounts for the upward pressure on prices in the final stages of the plan.

16. Since the increase of national output as a whole slowed down in the latter part of the plan at a time when investment was increasing steadily, no direct relationship between aggregate investment and the rise in aggregate output for the plan period as a whole can be established. To an extent, the increase in agricultural output in 1953 and 1954 is attributable to good monsoons. It is, nevertheless, true that the quinquennial average of agricultural yields over the plan period was higher than in the previous period. National income cannot but show fluctuations from year to year in an economy which has a large agricultural sector depending on monsoons, and a fairly long period of steady investment is necessary before the results expected materialise fully and a clear pattern of investment-output relationship emerges for the economy. It must also be mentioned that the sectoral data on national income are by no means complete or fully reliable. It is certain too that the results of some of the investments made in the plan period will accrue in later years because of the usual time-lag between investments and the realisation of output. It is now clear that some of the increases in output which occurred during the period of the plan were rather fortuitous, and that it will be some time after the base of the

economy has been strengthened at several points that a process of stable and assured growth can be said to have been initiated. All this indicates that the progress recorded in the first plan period, significant as it was both for its direct as well as indirect benefits, was in reality the beginning of an expansionary phase rather than a completed phase in itself.

17. The phasing of investment in the plan period also explains the unfavourable trend in employment after the collapse of the Korean boom and for some time thereafter. In 1953, the employment situation, especially in the urban areas, worsened noticeably. This led to the decision to increase plan outlays by some Rs. 300 crores over the level of Rs. 2,069 crores proposed earlier. While not all the additional programmes could be carried through fully and the direct impact of the fresh outlays was probably not large, the increasing tempo of public expenditure and the high levels of investment in the private sector in the latter part of the plan period cannot but have reacted favourably on employment. It is not possible to adduce direct evidence of this in the figures available. The total number of the unemployed registered with the Employment Exchanges continued to increase throughout the plan period from a level 337,000 at the end of March 1951 to 705,000 at the end of March 1956. However, the Employment Exchange data relate to only a part of the urban employment market, and the increase in registrations may only indicate greater readiness to try out this avenue for securing employment. Studies undertaken in the Planning Commission indicate that the growth of employment opportunities in the plan period tended on the whole to lag behind the increase in the labour force. The extent of unemployment and underemployment in the economy as a whole is thus not likely to have diminished significantly over the plan period, as this is a problem rooted structurally in the economy. But, there was a qualitative improvement in the employment situation in the later stages of the plan; and, indeed, in certain sectors, increasing shortages of semi-skilled and technical personnel were felt.

MONEY AND PRICES

18. Over the plan period as a whole, money supply increased from Rs. 1,979 crores to Rs. 2,18½ crores, that is, by a little over 10 per cent, and prices at the end of the plan period were 13 per cent lower than when the plan commenced. Here, again, it must be borne in mind that there have been two broad phases. In the early part of the plan, money supply as well as prices registered a fall, and both picked up in the latter phase as investment, public and private increased. Thus, between March 1951 and March 1953 money supply declined by Rs. 215 crores; there was a small increase of Rs. 30 crores in the next twelve months; between March 1954 to March 1956 the increase was Rs. 390 crores. It was in this period

that a large part of the deficit financing undertaken in the plan period materialised, while the rate of growth of output slackened. Prices followed a broadly similar pattern, though with variations. The index of wholesale prices came down from 450 in March 1951 to 378 in March 1952 as a result partly of the large import surplus that year and partly of the disinflationary fiscal and monetary measures taken by Government. In fact, by May 1952, the index fell further to 367. Prices recovered thereafter and fluctuated within narrow limits in 1953-54. The substantial increase in agricultural production that year exerted a further downward pressure on prices, especially on prices of food and agricultural products, and it became necessary for Government for a while to take measures to support these prices. A distinctly upward phase started as from July 1955, the rise in prices as from that date to the end of the plan period being about 14 per cent. As is well known, prices since then have continued on an upward course, reflecting the growing pressures of demand in the system in the face of an inadequate increase in supplies. On the whole, the implementation of the development programmes in the plan did not cause any significant strain on the economy, mainly because of the increases in output recorded about the middle of the plan period. But, by early 1956, the economy was more or less fully stretched.

19. The balance of payments position over the plan period was far more satisfactory than was originally expected. The rough estimates made in this respect while formulating the plan indicated the possibility of an average annual deficit of the order of Rs. 180—200 crores. The payments position, in fact, turned out to be substantially more favourable, the deficit of Rs. 163 crores in 1951-52 being followed by surpluses of Rs. 60 crores and Rs. 47 crores respectively in the next two years. In 1954-55, there was again a small surplus of Rs. 6 crores on external account, which increased to Rs. 15 crores in the final year of the plan. For the five year period, the deficit totalled Rs. 30 crores, but this is after taking credit for 'official donations' aggregating to Rs. 96 crores. As compared to the drawing down of Rs. 290 crores of sterling balances envisaged in the plan, the actual drawal was Rs. 138 crores. The availability of the U.S. wheat loan in 1951-52 and the large increases in domestic output thereafter, the abatement of inflationary pressures, and the low level of machinery and capital goods imports almost until the last year of the plan contributed to the unexpectedly stable balance of payments position in the plan period.

STRUCTURAL AND POLICY ASPECTS

20. While the immediate tasks proposed in the first five year plan were summed up in the programme of investments proposed to be undertaken by the Central and State Governments, the approach

of the plan was much wider. It was recognised that structural and institutional changes of a far-reaching character would be necessary if the process of development was to bring forth the desired results not merely in terms of the increase in output but in terms of an increase in the production potential and of the satisfaction of vital democratic and egalitarian urges within the community. The plan indicated various directions in which action would be required in pursuance of this objective: the establishment of a nation-wide national extension and community projects movement, land reforms, the expansion and strengthening of co-operative organisations in credit, in trade, in housing and in certain spheres of production, reorientation of the banking and credit structure and the establishment of a new relationship between the public and the private sector in the interests of orderly growth. Significant developments have been initiated in all these respects in the plan period, and it was with a view to emphasising the need for further and more rapid change in these directions that the Parliament passed in December 1954 a resolution adopting the socialist pattern of society as the objectives of economic and social policy. The Industrial Policy Resolution adopted in April 1956 consequently places larger responsibility on the State for industrial development.

21. A word may be said here about the instruments and techniques which the report on the first five year plan dealt with in some detail. It was emphasised in that report that in the transformation of the economy in the light of the objectives and priorities accepted the State will have to play the crucial role. During the plan period there has been a considerable enlargement of the responsibility of the State in the economic field. While the responsibility for industrial development in the first plan period was placed mainly on the private sector, the State exercised a regulatory role and has endeavoured to encourage private investment in priority lines. The role of the State as a key factor in development has come to be fully recognised, whether the State enters the field directly or confines itself to exercise general control and direction. It must, however, be said that the modest scale of investment in the first plan and the improvement in the economic situation consequent on increases in both agricultural and industrial production obviated the need on the part of the State to use the techniques of regulation and control with vigour. The improvement in the food situation in 1953-54 made it possible to abandon food controls and the satisfactory balance of payments situation almost continuously since the second year of the plan enable the investment programmes both in the public and in the private sectors to go through without causing any significant strain on the system. While this was a welcome development in itself, it has to be recognised that in a sense this situation prevented any testing out of the techniques or instruments

for planned development discussed in the report on the first plan. It would be wrong to conclude that these techniques or instruments are unnecessary for planning. These problems arise only when the investment effort becomes large relatively to the resources available and it is in such circumstances that strategic controls at certain points in the economy to supplement the over-all financial and monetary discipline implied in a plan of development can be of material assistance in overcoming transitional difficulties.

22. Finally, the working of the plan has brought out even more clearly than before the need for an improvement in statistical and analytical techniques for the formulation of suitable policies and their assessment. In retrospect, it appears that at a certain stage in the five year period investment could, with advantage, have been stepped up beyond the levels then current. The available data in regard to the employment situation, the levels of investment in various sectors of the economy and various technical determinants of development are too inadequate for a precise assessment of the forces operating within the system and their likely outcome. The task of working out a set of balanced inter-related targets for the various sectors and sub-sectors of the economy is, correspondingly, difficult. But, of course, the development of the appropriate tools of thinking and the evolution of suitable instruments and techniques of planning for the various types of situations that emerge from time to time have necessarily to be part of the process of growth which the successive plans are intended to foster.

23. To conclude: the first five year plan was instrumental in bringing about a marked improvement in levels of production, both in agriculture and in industry. It also initiated a number of structural and institutional changes. The plan has evoked wide-spread public interest and enthusiasm and there is a new and insistent urge for rapid development all over the country. Altogether, the first plan was only an initial step. The problems of resources mobilisation and of countering the shortages and bottlenecks at various points which are associated with sustained development effort did not emerge fully in the period of the plan. Both from the point of view of the stepping up of investment substantially and of keeping the various sectors of the economy moving together in balance, the real tasks, it could be said, are yet ahead.

APPENDIX I—contd.

Production/Target of
Develop additional
ment in the base
year
1950-51
Production/Target of
develop-ment
at the end of
the plan
Actual Production/Development in
1951-52 1952-53 1953-54 1954-55 1955-56
Achieve-ment in
1955-56
as per-centage
of the
plan
target

(a)	(b)	(c)	(d) (b+c)	(e)	(f)	(g)	(h)	(i)	(j) (i-b)	(k)
(viii) Jute Manufactures (000 tons)	824	376	1,200	931	910	865	971	1,054	230	61
(ix) Bicycles ('000 Nos.)	97	433	530	118	211	289	401	513	416	96
(x) Sewing machines (000 Nos.)	33.0	58.5	91.5	48.0	52.0	68.0	81.0	111.0	78.0	133
(xi) Power alcohol (million gallons)	5.0	13.0	18.0	6.5	8.0	9.0	8.0	10.4	5.4	41
(xii) Sugar ('000 tons)	1,100	400	1,500	1,494	1,291	1,001	1,590	1,860	760	190
V. TRANSPORT										
(i) Shipping tonnage :										
(a) Coastal (Lakh GRT)	2.2	1.05	3.25	2.4	0.2	19
(b) Overseas (Do.)	1.7	1.15	2.85	2.4	0.2	19

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(ii) Roads		12.3	0.6	12.9	12.9	0.6	100
(a) National Highways ('000 miles)		12.3	0.6	12.9	12.9	0.6	100
(b) States Roads ('000 miles)		97.5	..	..	..	..	121.6	24.1	..
Surfaced		97.5	..	..	..	..	121.6	24.1	..
Unsurfaced		151.0	..	..	..	..	195.1	44.1	..
VI. SOCIAL SERVICES									
(i) Education									
(a) Primary schools ('000 numbers)		209.7	..	..	215.0	223.2	239.4	263.6	280.0
(b) Number of pupils in primary schools/classes (in lakhs)		186.8	101.2	288.0	193.0	198.0	212.1	226.2	248.1
(c) Percentage of school going children aged 6-11		41.2	18.8	60.0	42.2	43.8	46.5	47.7	51.1
(d) Basic schools (Nos.)		1,751	..	..	2,178	3,074	4,686	7,283	15,800
(e) Number of pupils in basic schools (lakhs)		1.85	..	..	2.26	3.39	5.06	7.09	11.0
(ii) Health									
(a) Hospital beds ('000 Nos.)		113	12	125	120	124	127	136	N.A.
(b) Dispensaries and Hospitals—Rural and Urban (Nos.)		8,600	1,400	10,000	9,549	9,494	9,598	9,806	N.A.

CHAPTER II

PLAN OUTLAY AND ITS FINANCING

I. PLAN OUTLAY

ACCORDING to the latest data available, the aggregate outlay on the plan over the five years was about Rs. 1,960 crores. This estimate is based on the 'accounts' for the first four years and an approximation for the fifth year in the light of the 'revised estimates' and certain other data bearing on the actual outturn.

2. The bulk of the discussion in this chapter is, however, based on the accounts for the first four years and the 'revised estimates' for the fifth year as all the other relevant magnitudes in the budget documents can be related to these estimates only.

3. The distribution of the plan outlay between the Centre and the States year by year is shown in the table below:

(Rs. crores)									
	1951- 52	1952- 53	1953- 54	1954- 55	Total for 4 years 1951- 55	1955-56 Total for 5 years (Revised Estimate) 1951- 56	Total for 5 years (Revised Estimate) 1951- 56	Plan target Original	Revised
<hr/>									
Centre . . .	132.1	125.4	181.3	283.6	722.4	392.5	1114.9	1233.7	1389.5
States . . .	127.3	142.2	161.7	192.3	623.5	274.0	897.5	835.0	988.2
<hr/>									
TOTAL	259.4	267.6	343.0	475.9	1345.9	666.5	2012.4	2068.7	2377.7
<hr/>									

The plan as formulated in 1952 proposed a total outlay of Rs. 2,069 crores by the Central and State Governments together. Later, the plan was expanded and various adjustments were made mainly with a view to stepping up the aggregate outlay from the levels in the early years and to provide more employment opportunities. These additions, it was recognised, were in part at least substitutions for schemes in respect of which progress was slow for various reasons. These adjustments raised the size of the plan to Rs. 2,378 crores. As the above table shows, the target of expenditure to be incurred by the Centre was Rs. 1,390 crores and that of all States taken together

was Rs. 988 crores. As compared to these revised targets the expenditure by the Centre is estimated to have been about Rs. 1,115 crores and the expenditure by the States about Rs. 897 crores. Even allowing for the downward adjustments in the revised estimates for 1955-56 because of the usual divergence between the revised estimates and the actuals, the step up in expenditure both at the Centre and in the States over the period of the plan has been impressive, the expenditure by the Centre in 1955-56 being a little under three times the level of expenditure in 1951-52 and that by the States slightly over double the level in the first year of the plan. The slow start of the plan in the initial years has been commented on in the earlier reports of the Planning Commission. There was a substantial step up in the fourth and fifth years, as much as 57 per cent of the total expenditure over the five-year period being accounted for by these two years. As the discussion in this chapter will show, the progress in raising resources and the pattern of financing that emerged are linked closely with the phasing of plan outlay in the manner just described.

4. The following table shows the progress of expenditure at the Centre and in the States year by year and under major developmental heads.

Progress of expenditure at the Centre and in the States by major heads of development

(Rs. crores)

	1951-52	1952-53	1953-54	1954-55	Total for four years 1951-55	1955-56 (Revised Estimate)	Total for five years 1951-56	Plan provisions Original Revised	Percent- age short- fall (Col. 8 to Col. 10)		
	(Accounts)										
	1	2	3	4	5	6	7	8	9	10	11
1. Agriculture .	29.3	28.6	37.1	52.4	147.4	79.5	226.9	240.8	249.3	9.0	
Centre . .	1.9	3.9	11.6	21.3	38.7	32.9	71.6	66.3	83.7	14.3	
States . .	27.4	24.7	25.5	31.1	108.7	46.6	155.3	174.5	165.4	6.1	
2. C.P. & N.E.S.	...	1.4	5.9	17.4	24.7	32.6	57.3	90.0	90.0	36.3	
Centre . .	...	1.4	5.9	17.4	24.7	32.6	57.3	90.0	90.0	36.3	
States . .	...	...	...	...	...	...	...	...	...	...
3. Irrigation & Multi-purpose Projects .	61.1	72.8	83.0	99.2	316.1	116.0	432.1	433.6	468.8	7.8	
Centre . .	35.4	41.4	51.2	55.8	183.8	57.0	240.8	265.9	255.9	5.9	
States . .	25.7	31.4	31.8	43.4	132.3	59.0	191.3	167.7	212.9	10.0	
4. Power Projects	22.3	25.0	28.5	29.7	105.5	47.4	152.9	127.5	178.6	14.4	
Centre	
States . .	22.3	25.0	28.5	29.7	105.5	47.4	152.9	127.5	178.6	14.4	

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	1951-52	1952-53	1953-54	1954-55	Total for four years 1951-55	1955-56 (Revised Estimate)	Total for five years 1951-56	Plan provision		Percent- age short- fall (Col. 8 to Col. 10)
	(Accounts)							Original	Revised	
	1	2	3	4	5	6	7	8	9	10
5. Industry		10.6	9.4	18.4	21.5	59.9	39.9	99.8	172.9	183.2
Centre		6.8	5.8	13.0	16.6	42.2	34.1	76.3	146.7	158.8
States		3.8	3.6	5.4	4.9	17.7	5.8	23.5	26.2	29.4
6. Medical and Public Health		11.7	13.2	16.5	22.9	64.3	36.6	100.9	100.9	137.8
Centre		0.1	0.2	2.4	5.3	8.0	5.8	13.8	17.9	20.3
States		11.6	13.0	14.1	17.6	56.3	30.8	87.1	83.0	117.5
7. Rehabilitation		26.2	20.2	13.5	15.7	75.6	21.7	97.3	85.0	135.7
Centre		26.2	20.2	13.5	15.7	75.6	21.7	97.3	85.0	135.7
States	
8. Transport & Communications		68.7	63.8	85.7	133.8	352.0	179.5	531.5	498.5	570.0
Centre		56.2	45.4	63.5	108.3	273.4	145.3	419.7	409.5	455.1
States		12.5	18.4	22.2	25.5	78.6	33.2	111.8	89.0	103.9
9. Other heads*		29.5	33.2	54.4	83.3	200.4	113.5	313.7	319.5	359.3
Centre		5.5	7.1	20.2	43.2	76.0	62.1	138.1	152.4	178.8
States		24.0	26.1	34.2	40.1	124.4	51.2	175.6	167.1	180.5
GRAND TOTAL		259.4	267.6	343.0	475.9	1345.9	666.5	2012.4	2058.7	2377.7
Centre		132.1	125.4	181.3	283.6	722.4	392.5	1114.9	1233.7	1389.5
States		127.3	142.2	161.7	192.3	623.5	274.0	897.5	835.0	988.2

*Inclusive of local development works.

As compared to the revised plan provisions, there have been shortfalls practically under all heads. In general, these shortfalls have occurred either because of the late commencement of the schemes or because of inadequate administrative and organisational arrangements for implementation. In the case of industrial programmes, for example, the shortfall was due to the fact that the preliminary arrangements and negotiations in regard to the iron and steel and heavy electrical plants took much longer time than was expected. In the case of community projects, to take another example, the provision of Rs. 90 crores was only a rough estimate, and secondly the level of expenditure proposed per unit of development area was reduced later in the light of experience. Moreover, the arrangements made for the sharing of this expenditure involved some outlay by the States which has remained outside the plan. The performance under major heads had been reviewed in detail in the appropriate chapters in this report.

5. The following table compares the pattern of outlay as it actually materialised over the plan period with the pattern that was in view when the plan was initially formulated.

	Per cent of the total outlay as now estimated	Per cent of the total outlay as originally proposed
1. Agriculture and Community Development	15.0	16.0
2. Irrigation and Power	29.0	28.0
3. Industries	5.0	8.0
4. Transport and Communications	26.0	24.0
5. Social Services (including miscellaneous)	25.0	24.0
TOTAL	100.0	100.0

It will be observed that apart from the outlay on industries, where a large shortfall occurred, the rest of the pattern conforms fairly closely to the initial order of priorities accepted in the plan. As much as 43 per cent of the plan outlay was devoted to agriculture and irrigation and power, which were the first priorities in the plan. Transport and communications absorbed 26 per cent of the plan expenditure, and social services including rehabilitation of displaced persons and some miscellaneous items also accounted for another 26 per cent.

6. The distribution of the aggregate plan outlay in the field of investment and current expenditure has been broadly in the ratio of 3 to 1. The aggregate expenditure on capital account corresponding to the total outlay of Rs. 2,012 crores amounts to Rs. 1,470 crores, the balance, namely, Rs. 542 crores being expenditure on revenue account. Part of this latter has been of the nature of investment, so that on the whole, if aggregate expenditure on the plan is taken at Rs. 1,960 crores as suggested earlier, the total of investment in the public sector would work out at around Rs. 1,500 crores. This, as mentioned in the earlier chapter, together with the estimated investment of about Rs. 1,600 crores in the private sector, gives a total of about Rs. 3,100 crores of aggregate investment in the economy.

7. The progress of development expenditure at the Centre and by each individual State is given in a series of detailed tables at the end of this report. For purposes of convenience a synoptic table

showing the expenditure incurred by the Centre and by each individual State relatively to the plan targets is given below:

Expenditure incurred on the Plan

(Rs. crores)

	1951-56 Expenditure incurred	Expenditure incurred as percentage of target
I. Centre	1114.9	82.2
II. States		
PART 'A'		
1. Andhra and Madras	149.8	95.2
2. Assam	21.0	96.8
3. Bihar	73.2	105.5
4. Bombay	156.2	97.8
5. Madhya Pradesh	42.5	88.2
6. Orissa	18.3	86.3
7. Punjab	31.8	92.4
8. Uttar Pradesh	105.5	81.3
9. West Bengal	74.6	97.5
TOTAL 'A' STATES	672.9	93.7
PART 'B'		
10. Hyderabad	34.4	73.2
11. Madhya Bharat	21.3	94.2
12. Mysore	43.1	86.7
13. Pepsu	9.9	97.1
14. Rajasthan	22.3	79.6
15. Saurashtra	25.8	94.9
16. Travancore-Cochin	26.1	83.3
17. Jammu and Kashmir	11.1	87.4
TOTAL 'B' STATES	192.0	85.0
PARTS 'C' AND 'D'	32.6	73.6
TOTAL : all States	897.5	90.8
TOTAL : CENTRE & STATES	2012.4	84.6

II. FINANCING OF THE PLAN

8. The picture of financial resources for the Plan—Centre and States combined—on the basis of the 'accounts' for the first four years and the 'revised estimates' for the fifth year is shown in the table below:—

Financing of the Plan 1951-56

(Rs. crores)

	1951-52	1952-53	1953-54	1954-55	Total for 4 years 1951-55	1955-56. (Revised Estimate)	Total for 5 years 1951-56	Plan 1951-56 Original Revised
	(Accounts)							
1. Outlay on the plan	259.4	267.6	343.0	475.9	1345.9	666.5	2012.4	2059.0 2377.7
2. Budgetary resources	204.8	141.3	246.1	368.6	960.8	316.5	1277.3	1258.0
3. External assistance	64.9	45.6	18.5	16.0	145.0	58.2	203.2	521.0
4. Deficit	-10.3	80.7	78.4	91.3	240.1	291.8	531.9	290.0

In the plan as it was originally formulated, the estimate of total domestic resources to be raised by way of taxes, loans, small savings etc. was Rs. 1,258 crores, the balance of Rs. 811 crores being financed from external assistance to the extent available and from a combination of measures to raise domestic resources by way of taxes or loans or deficit finance as the circumstances might warrant. External assistance to the tune of Rs. 156 crores was already in sight when the plan was formulated and it was expected that some further external assistance would also be available. It was recognised at the same time that deficit financing should not, unless special circumstances arose, exceed Rs. 290 crores which corresponded to the drawal of sterling balances. Actually, as the table above shows, (apart from the fact that the figures for the fifth year are subject to revision) budgetary resources have been close to the expectations; external assistance utilised came to about Rs. 200 crores, which is only about Rs. 50 crores more than the assistance in sight when the plan was formulated. Consequently, the extent of deficit financing necessary had to exceed the limit of Rs. 290 crores indicated in the Plan. As will be shown later, both the plan outlay in the fifth year as well as the extent of deficit financing were smaller than the above table will indicate.

9. Appendix I at the end of this chapter gives a more detailed break-down of the contribution of the various modes of financing to the combined outlay of the Centre and the States year by year and

for the five-year period. Appendix II presents a similar break-down for the Centre, and Appendix III for the States taken together. Appendices III(1) to III(18) relate to the financing of the plan for each State separately.

10. As will be seen from Appendix II, of the outlay of Rs. 1115 crores at the Centre over the five-year period, Rs. 420 crores or about 38 per cent of the total was financed from revenue surpluses and the earnings of railways; Rs. 358 crores or some 32 per cent became available by way of net receipts from loans, small savings and other capital receipts. As against this total of Rs. 778 crores, the Centre transferred Rs. 350 crores to the States by way of Central assistance for State Plan. The balance of Rs. 428 crores remaining with the Centre was augmented by the receipt of Rs. 203 crores of funds from abroad. Thus the Centre had at its disposal a sum of Rs. 631 crores against its Plan outlay of Rs. 1115 crores. On this basis, deficit financing at the Centre for the five-year period works out at Rs. 484 crores. The account figures for 1955-56 show the actual deficit in that year at Rs. 180 crores, which means that for the five-year period the deficit of the Centre was Rs. 428 crores.

11. In the States, (Appendix III) the total outlay of Rs. 897 crores was financed as follows:—

	(Rs. crores)
(i) Current revenues	269
(ii) Public borrowings and capital receipts	230
(iii) Central assistance	350
(iv) Deficit financing	48
TOTAL	897

The States found from their revenues about 30 per cent of the resources required for financing their Plans. Another 26 per cent or so was raised by way of borrowings and other capital receipts and as much as 39 per cent represents the contribution of the Centre. There was still left a deficit of about 5 per cent on the basis of the revised estimates for the final year that we have been following. Actually, however, taking the Plan period as a whole there has been little deficit financing by the States taken together.

III. THE TAX EFFORT

12. In the plan as initially formulated the contribution of current revenues including fresh taxation and the receipts of railways was estimated at Rs. 740 crores. Thus, the surpluses of public authorities were assumed to contribute 53 per cent of the total budgetary resources amounting to Rs. 1,258 crores. While, as mentioned

earlier, the aggregate budgetary resources were, more or less, of the order initially expected, the contribution of current revenues and the earnings of the railways over the plan period work out at Rs. 690 crores as compared to the target of Rs. 740 crores. The shortfall is accounted for by lower contributions from the railways, the balance from revenues taking the Centre and the States together being close to expectations. The Centre was able to find from current revenues Rs. 145 crores more than the plan targets required while in the States there was almost an equal shortfall. This shortfall in the States occurred in spite of the transfer of Rs. 80 crores or so to them under the Finance Commission's award.

13. It was recognised from the very beginning that the aim of fiscal policy both at the Centre and in the States should be to provide from out of the current revenues as large an amount as possible to finance the rising investment expenditures to be undertaken in the course of the plan period. The Central Government imposed substantial taxation in 1951-52 partly for this reason but mainly in order to generate a disinflationary climate. Export duties which had been raised in 1950-51 were raised further on a number of commodities in order to draw into the public exchequer a proportion of the increasing incomes being made in the export sector. The other measures taken in that year include a surcharge on income-tax, an increase in the corporation tax, additional excise duties and import duties. Altogether, the increase in taxation proposed in that year amounted to Rs 32 crores. Towards the close of the year, it became necessary to reduce export duty on jute. In the two subsequent years, inflationary pressures had abated and some further reductions had to be made in export duties. The other changes made in these two years were relatively small. In 1954-55, sizeable increases were made again in excise duties. By this time, the expenditure on the plan had risen substantially and it was intended that the outlay should be stepped up as rapidly as possible in order to ensure the fulfilment of the plan. The additional taxation imposed in 1954-55 amounted to Rs. 11 crores. In 1955-56, the final year of the plan, both direct and indirect taxation was raised further, the major increases being under income-tax and excise duties. The yield of the new tax measures was estimated at Rs. 17 crores for the year. Altogether, over the five years the yield of additional measures of taxation at the Centre-excluding export duties, which in their nature are variable, was about Rs. 175 crores.

14. The contribution of railways from their current revenues to the financing of their development programmes totalled Rs. 115 crores over the plan period as compared to Rs. 170 crores for which credit was taken in the estimates presented initially in the Plan document. The railway fares were put up in 1951-52, the estimated

yield of the increases being Rs. 18 crores for the year. Some adjustments were also made in freights rates in 1951-52 and 1952-53. The railway fares and freights were again changed somewhat in 1955-56. Over the five-year period, the increases in fares and freights are estimated to have brought in about Rs. 100 crores. Nevertheless, the contribution of the railways was not upto the initial expectations because of the increase in working expenses and a fall in earnings consequent on the emergence of recessionary conditions in 1952-53 and 1953-54.

15. As regards the States, the contribution from revenues over the five-year period was Rs. 269 crores as compared to the plan estimate of Rs. 410 crores—a short-fall of about 34 per cent—despite, as mentioned earlier, the transfer of Rs. 80 crores or so to them as a result of the Finance Commission's award. The target of additional taxation by States as laid down in the plan was Rs. 230 crores. Actually, it is estimated that the total yield of all the measures taken by State Governments during the plan period was of the order of Rs. 80 crores. In the report on the Five-Year Plan, the State-wise break-up of this total of Rs. 230 crores was not fully worked out. This was done later and targets for each individual State were worked out in consultation with the authorities concerned. The following table compares the performance in respect of additional taxation by each State relatively to the targets.

Additional Taxation in the States

		(Rs. crores)	
States		Five-year targets	Achieve- ments (1951-56)
<i>Part 'A'</i>			
Assam	. . . . .	3.5	3.3
Bihar	. . . . .	7.3	3.0
Bombay	. . . . .	23.5	24.0
Madhya Pradesh	. . . . .	10.6	2.3
Madras (including Andhra)	. . . . .	39.3	8.0
Orissa	. . . . .	9.4	2.0
Punjab	. . . . .	5.0	4.5
U.P.	. . . . .	50.2	11.0
West Bengal	. . . . .	36.9	4.5
TOTAL 'A'		185.7	62.6

(Rs. crores)

States	Five-year targets	Achievements 1951-56
<i>Part 'B'</i>		
Hyderabad	7.4	1.0
Madhya Bharat	4.9	2.7
Mysore	9.2	3.0
Pepsu	4.1	0.4
Rajasthan	3.3	2.6
Saurashtra	4.7	2.1
Travancore-Cochin	11.0	6.0
TOTAL 'B'	44.6	17.8
TOTAL 'A' and 'B'	230.3	80.4

Bombay fulfilled the target fully. Assam and Punjab almost fulfilled the target. In other States, the actual tax effort was much below the targets prescribed. It might be mentioned in this connection that the target of Rs. 230 crores included, in some cases, measures of economy in the matter of expenditure. It was also recognised that these targets were not based on any close study of the taxable capacity of the States. Nevertheless, the conclusion is inescapable that the progress in the matter of additional taxation in the States has not been commensurate with the requirements of the plan.

16. Of the total yield of Rs. 80 crores, about a half was accounted for by general sales tax, tax on sale of motor spirit and sales tax on tobacco, cigarettes and cigars. Taxes on motor vehicles also made a significant contribution. While irrigation rates were put up in some States, these increases yielded only Rs. 6 crores as compared to the plan estimate of Rs. 29.5 crores. The additional revenue from taxation of land which the plan had placed at Rs. 34 crores turned out to be only Rs. 5.4 crores. It must also be mentioned that while the plan had estimated the States' share of Estate Duty at Rs. 21 crores, actually this source contributed only a little

over Rs. 2 crores. The following table shows itemwise break-up of the additional tax measures in the States:—

	(Rs. crores)
1. Taxation on Land (land revenue, agricultural income-tax etc.)	5.4
2. Irrigation rates	6.0
3. Electricity duties	3.0
4. Motor vehicles tax	9.3
5. General sales tax	31.8
6. Tax on sale of motor spirit	6.0
7. Sales tax on tobacco, cigarettes and cigars	1.4
8. Tax on capital transfers (Estate Duty and transfer of property in urban areas)	3.1
9. Surcharge on passenger travelling by public transport and buses.	5.3
10. Miscellaneous	9.1
TOTAL	80.4

IV. PUBLIC BORROWINGS

17. At the time the plan was formulated, the outlook for public borrowings was far from encouraging, the market in fact being so weak that there was pressure on the Reserve Bank to support it. Consequently, the targets for borrowing by the Centre and by the States were kept at low levels, viz., Rs. 36 crores for the Centre and Rs. 79 crores for the States. Taking the Centre and the States together the net borrowing from the market in 1951-52 was negative to the extent of Rs. 22.8 crores. In other words, Rs. 22.8 crores was paid out by way of repayment of maturing loans. In the next two years the market showed some improvement, but it was not until the fourth year that substantial borrowing programmes could be undertaken. The Centre continued to make repayments for the first three years, Rs. 34.2 crores in 1951-52, Rs. 0.9 crore in 1952-53 and Rs. 37.2 crores in 1953-54. The States were able to put through moderate borrowing programmes in the first two years and were able to step them up substantially in 1953-54. In the first three years of the plan taking the Centre and the States together, repayments of maturing loans exceeded the contribution of fresh loans by Rs. 5 crores. In 1954-55 the Centre raised a combined loan of Rs. 159 crores of which Rs. 46 crores represented maturities, the net borrowings thus being Rs. 113 crores. Of this, Rs. 26 crores was made available to the States. In addition, two States were able to borrow

Rs. 7 crores directly. In 1955-56 the net loan receipts of the Centre and the States combined amounted to Rs. 89.4 crores. Over the five years, the plan target for market loans was exceeded by Rs. 89 crores.

V. SMALL SAVINGS

18. The following table shows the collections of small savings annually for the plan period:—

Year	(Rs. crores)
1951-52	38.5
1952-53	40.2
1953-54	37.8
1954-55	54.6
1955-56	66.1
<hr/>	
TOTAL	237.2

The record of small savings showed steady improvement over the plan period, the total collection being Rs. 237 crores as compared to the target of Rs. 225 crores. The collections from small savings by the end of the plan period were about double the collections in 1950-51, and it is significant that over the plan period they have financed about 12 per cent of the plan outlay. In addition to these small savings, provident fund contributions and other similar items of unfunded debt at the Centre contributed Rs. 67 crores over the five-year period.

VI. OTHER CAPITAL RECEIPTS

19. In the plan, the composite head of deposits, funds and other miscellaneous sources was estimated to show a net accretion of Rs. 132.8 crores. It was stressed in that context that the outturn on this head which included a large variety of items was liable to show rather large variations in either direction and the estimate was, therefore, only notional. The net contribution under this head is now estimated at Rs. 79.6 crores, the short-fall being of the order of Rs. 53 crores.

VII. EXTERNAL ASSISTANCE

20. External assistance (in loans and grants) made available over the plan period for development programmes in the public sector aggregated to Rs. 296 crores. Of this about Rs. 188 crores was utilised over the five years, leaving a carry forward of Rs. 108 crores for the next plan period. The following table shows the amounts

REVIEW OF THE FIRST FIVE YEAR PLAN

authorised from various sources and utilised during the plan period year by year:

Authorisation and Utilisation of External Assistance (Public Sector)
1951-52 to 1955-56.

(Rs. crores)								
	Total authorisations (1951-56)	Utilisation					Total (1951-56)	
		1951-52	1952-53	1953-54	1954-55	1955-56		
<i>Loans</i>								
U. S. Government— Wheat Loan	90.3	59.8	30.5	..	..	..	90.3
Indo-U.S. Aid Programme	39.3	..	..	..	..	4.5	4.5
International Bank	12.5	1.0	3.1	1.5	0.7	1.3	7.6	
TOTAL LOANS	142.1	60.8	33.6	1.5	0.7	5.8	102.4	
<i>Grants</i>								
Indo-U.S. Aid Programme	102.5	..	4.1	14.4	12.7	27.0	58.2	
<i>Colombo Plan :</i>								
Canada	32.34	..	7.1	2.0	2.0	8.6	19.7	
Australia	11.08	3.7	0.2	0.2	0.8	0.2	5.1	
New Zealand	1.7	0.3	..	..	..	..	0.3
U.K.	0.4	..	..	..	0.01	0.03	0.04
Ford Foundation	5.6	..	0.6	0.4	0.5	0.6	2.1	
Indo-Norwegian Programme	0.66	..	..	0.05	0.09	0.13	0.27
TOTAL GRANTS	154.28	4.0	12.0	17.05	16.10	36.56	85.71	
TOTAL GRANTS AND LOANS	296.38	64.8	45.6	18.55	16.80	42.36	188.11	

21. Of the authorisations, the largest share—Rs. 232 crores—was contributed by the U.S. Government. The U.S. Government assistance was made up of Rs. 90 crores under the Wheat Loan and Rs. 142 crores under the Indo-U.S. Aid Programme. Loans from the International Bank, including the unutilised portion of the loans advanced before the plan period, amounted to a little over Rs. 12 crores. Contributions of Colombo Plan countries totalled about Rs. 45.5 crores; and of this the share of the Canadian Government was Rs. 32 crores. Assistance from the Ford Foundation and the Norwegian Government amounted to Rs. 5.6 crores and Rs. 0.66

crores respectively. Of the aggregate external assistance received in the plan period, Rs. 142 crores was in the form of loans and Rs. 154 crores was grants. Apart from the U.S. Wheat Loan authorised in the first year of the plan, authorisations of external assistance ranged between Rs. 35 crores and Rs. 48 crores a year.

22. Of the total utilisations of Rs. 188 crores, as much as Rs. 110·4 crores materialised in the first two years of the plan. However, as much as Rs. 90·3 crores was on account of the U.S. Wheat Loan. In the next two years the utilisation of funds available under these programmes totalled Rs. 35 crores. The low rate of utilisation in the earlier years of the plan was due largely to the delays in the formulation of programmes, the shortage of requisite equipment and personnel, and the difficult position in steel and shipping. Steps were taken in later years to overcome these difficulties; as a result, utilisation was speeded up in the last year of the plan, when it amounted to Rs. 42 crores.

23. External assistance was used mainly for the procurement of commodities like wheat and steel, and also of equipment required for the various development projects. Aside from the Wheat Loan obtained from the U.S.A. in 1951, wheat was supplied in the early years of the plan by Australia and Canada, and it was also provided in the last two years as part of the Development Assistance Programme of the U.S.A. The other important commodity, namely, steel, was supplied in substantial quantities by the U.S. Government under their Aid Programme. Equipment obtained by way of external assistance was of the type which is normally imported, namely, construction and power equipment for irrigation and power projects, rolling stock for railways, etc.

24. The Indo-U.S. Aid Programme in its present form commenced with the signing of the general agreement between the Governments of India and the U.S.A. in January 1952. According to the objectives set out in the agreement, stress was laid on joint projects relating to community development, tube-wells, river valley development, fertilisers and steel for agricultural purposes. Upto 1953-54 these were the main activities for which external assistance from the U.S.A. was utilised. From 1953-54 the scope of U.S. aid was widened; and the activities selected for the utilisation of assistance were increasingly in the fields of transport and industrial development, e.g., supply of locomotives and wagons for the railways, steel for industrial uses, and financing of major projects such as the Rihand Power Project. The pattern of development assistance underwent two changes in 1954-55. It was stipulated (a) that 75% of the development assistance would be on a loan basis, and (b) that about 50% of the development assistance would have

to be taken in the form of surplus agricultural commodities. This pattern of assistance was continued in 1955-56.

25. Of the three loans extended by the International Bank to the public sector before the first plan period, the Railway loan was fully used up before the commencement of the plan. In regard to the other two loans—the Agricultural Machinery Project loan and the Bokaro-Konar loan (D.V.C.) an amount of Rs. 4·8 crores was utilised before the plan period, and an unutilised balance of Rs. 7·5 crores carried over into the plan period. The International Bank advanced a second loan of Rs. 5 crores for the Damodar Valley Corporation in January, 1953. The Agricultural Machinery Project loan was completely utilised by the end of 1953-54; and most of the Bokaro-Konar loan by the end of 1955-56. Of the Second D.V.C. loan only a little over Rs. 1 crore was utilised by the end of the plan period.

26. Apart from the loans to the public sector, the International Bank advanced three loans to the private sector during the first plan period. The first of these was a loan for Rs. 15 crores extended to the Indian Iron and Steel Co. in December, 1952. The second was a loan of Rs. 7·7 crores for the Trombay Project (November 1954), and the third a loan of Rs. 4·8 crores for the Industrial Credit and Investment Corporation of India (March 1955).

27. Assistance from Canada was received mainly in the form of commodities such as wheat and industrial raw materials and of equipment for development projects. Besides imports of wheat, Canadian assistance in the first four years of the plan was used for the supply of buses, chassis etc. for the Bombay State Transport Corporation, copper and aluminium for the wire and cable industry, locomotive boilers for the railways, and electrical equipment for the Mayurakshi project. The bulk of the assistance allocated for 1955-56 was earmarked for the supply of electrical equipment for the Kunda hydro-electric project in Madras. Assistance from Australia in 1951-52 was for the supply of wheat and flour, and was fully utilised in that year. The next year's allocation of assistance was intended for the supply of construction equipment for the Tungabhadra Project and electrical equipment for the Ramagundam Project. Most of this assistance was utilised over the plan period. During the last three years of the plan, Australia allocated further assistance for the purchase of equipment for the All India Radio and of wagons and diesel rail cars for the railways. Of the assistance offered by New Zealand during the plan period only a small portion (Rs. 33 lakhs) was utilised in the first year in connection with the capital expenditure on the All India Medical Institute.

28. The Ford Foundation provided assistance over a broad range of programmes, namely, training of personnel for rural development, development of small scale industry, education, public administration, research and training, and to some extent cultural inter-change. The major part of the assistance was for the training of personnel, at all levels, for rural development work. Under the Indo-Norwegian Aid Programme a Fisheries-cum-Community Development Project was started in Travancore-Cochin in 1953 for improving the economic and sanitary conditions of the fisherman community.

29. In addition to the economic or development assistance referred to above, India received substantial technical assistance during the plan period from the United Nations and its specialized agencies, from the United States under the Point Four and subsequent programmes, and from Commonwealth countries under the Colombo Plan. This assistance comprised the services of experts, training facilities of Indian nationals, and the supply of demonstration equipment.

VIII. DEFICIT FINANCING

30. We may now sum up the budgetary position, *vis-a-vis* the Plan in terms of the budgetary deficits which were incurred year by year over the plan period. The following table shows the position.

Budgetary surplus or deficit of the Centre and States

(Rs. crores)

	1950-51 (Accounts)	1951-52 (Accounts)	1952-53 (Accounts)	1953-54 (Accounts)	1954-55 (Accounts)	1955-56 Revised Estimate	Total Plan Period (1951-56)
I. Centre							
1. Surplus (+) or deficit (-) on revenue account.	(+)59.2	(+)128.2	(+)38.9	(+)8.5	(+)33.5	(+)10.3	(+)219.4
2. Surplus (+) or deficit (-) on capital account.	(-)14.7	(-)72.9	(-)69.8	(-)135.7	(-)178.9	(-)245.9	(-)703.2
3. Overall surplus (+) or deficit (-) of the Centre	(+)44.5	(+)55.3	(-)30.9	(-)127.2	(-)145.4	(-)235.6	(-)483.8
States (A, B. & C)							
Surplus (+) or deficit (-) on revenue account.	(+)3.7	(+)12.1	(+)3.4	(-)2.9	(-)10.7	(-)66.3	(-)64.4
Surplus (+) or deficit (-) on capital account.	(+)10.0	(-)57.7	(-)53.4	(+)52.6	(+)63.5	(+)9.3	(+)14.3
Overall surplus (+) or deficit (-) in the States	(+)13.7	(-)45.6	(-)50.0	(+)49.7	(+)52.8	(-)57.0	(-)50.1
Overall surplus (+) or deficit (-) of the Union and States	(+)58.2	(+)9.7	(-)80.9	(-)77.5	(-)92.6	(-)292.6	(-)533.9

6-2 Sale of securities held
6-3 Withdrawals

APPENDIX III-I

Financing of State Plans 1951-56

ASSAM

(Rs. crores)

	1951-52	1952-53	1953-54	1954-55	1955-56 (Revised Estimate)	1951-56 (Total)	1951-56—Plan	
	(Accounts)					Original	Revised	
I	2	3	4	5	6	7	8	9
1. Plan Expenditure								
1.1 Revenue Account	1.3	2.0	3.1	5.0	9.6	21.0	17.5	21.7
1.2 Capital Account	1.2	1.8	2.3	2.7	4.5	12.5	..	..
2. Budgetary resources	0.1	0.2	0.8	2.3	5.1	8.5	..	..
2.1 Balance from revenue account	2.1	(-)1.5	1.7	3.2	2.7	8.2	2.5	
2.2 Loans from public	1.1	2.9	2.0	(-)0.2	1.6	7.4	1.3	
2.3 State trading	..	..	..	..	..	..	..
2.4 Deposits and other misc. receipts on capital account	(-)0.4	(-)2.0	(-)0.2	3.2	1.0	1.6	..	
3. Central assistance for the Plan	1.4	(-)2.4	(-)0.1	0.2	0.1	(-)0.8	1.2	
4. Total resources (2+3)	0.5	0.8	2.0	4.6	6.5	14.4	15.0	
5. Gap in resources (1-4)	2.6	(-)0.7	3.7	7.8	9.2	22.6	17.5	
6. Gap covered by:—	(-)1.3	2.7	(-)0.6	(-)3.8	0.4	(-)1.6	..	
6.1 Increase in floating debt	..	..	..	..	..	..	..

REVIEW OF THE FIRST FIVE YEAR PLAN

APPENDIX III-2

Financing of State Plans 1951-56

BIHAR.

	FIRST PLAN								
	1951-52			1952-53			1953-54		
	Accounts			Accounts			Accounts		
	2	3	4	5	6	7	8	9	
1. Plan Expenditure	13.4	9.8	9.1	14.5	26.4	73.2	57.3	68.7	
1.1 Revenue Account	11.0	8.0	7.0	8.4	18.0	52.4	..	..
1.2 Capital Account	2.4	1.8	2.1	6.1	8.4	20.8	..	..
2. Budgetary resources	..	10.6	9.9	5.7	(-) 0.3	25.3	32.3	31.3	
2.1 Balance from revenue account	5.9	9.2	8.0	2.0	(-) 2.8	22.3	..	..
2.2 Loans from public	..	..	1.3	..	1.5	2.8	..	..
2.3 State trading account	(-) 5.0	(-) 7.0	0.2	0.4	(-) 0.1	2.5	..	..
3. Central assistance for the Plan	(-) 0.9	(-) 5.6	0.4	2.7	1.1	(-) 2.3	1.0	1.0	
4. Total resources (2+3)	1.2	1.5	1.9	12.7	7.9	25.2	15.0	15.0	
5. Gap in resources (1-4)	1.2	12.1	11.8	17.8	7.6	50.5	47.3	47.3	
6. Gap covered by:—	12.2	(-) 2.3	(-) 2.7	(-) 3.3	18.8	22.7	10.0	10.0	
6.1 Increase in floating debt	(-) 0.5	(-) 1.9	..	..	9.4	7.0	..	..
	12.7	2.6	0.8	(-) 0.4	..	15.7	..	..
	..	(-) 3.0	(-) 3.5	(-) 2.9	9.4	..	..	..

1. The size of the State Plan was increased

- (i) Additional power pr
- (ii) Security areas pro
- (iii) Power expansion fr
- (iv) Urban water sup
- (v) Rural water sup
- (vi) Welfare of bac

Rs. 68.7 crores as a result of adjustments and additions.

The break-up of this increase under

(i) Agriculture	(Rs. crores)
(ii) Irrigation and Power	(-)-0.7
(iii) Industry	5.1
(iv) Roads	0.7
(v) Social service	2.8
	4.1

2. The State Government has raised to Rs. 25.3 crores so as to meet the increase in Plan outlay.

Commission. Further it received statutory grants amounting to Rs. 3.1 crores under the two provisions of the recommendations of the Finance Commission.

Yield from land revenue has increased from Rs. 1.6 crores in 1950-51 to about Rs. 5.8 crores in 1955-56. The improvement was mainly

due to abolition of Zamindari and was largely offset by increase in expenditure in this connection.

4. Receipts under State taxes excluding land revenue declined from Rs. 15.4 crores in 1950-51 to Rs. 12.0 crores in 1955-56. The down-

- (i) Enhancement of water-rates in October, 1952
- (ii) Enhancement of sales tax rates on luxury goods and revision of coverage
- (iii) Improvement in administration in respect of tax on passenger's fares and
- (iv) Enhancement of electricity duty from 1st October, 1953
- (v) Increase in sugar cane cess from 1952-53
- (vi) Others

Estimated yield 1951-56 (Rs. crores)

(i) Enhancement of water-rates in October, 1952	0.8
(ii) Enhancement of sales tax rates on luxury goods and revision of coverage	0.4
(iii) Improvement in administration in respect of tax on passenger's fares and	0.4
(iv) Enhancement of electricity duty from 1st October, 1953	0.2
(v) Increase in sugar cane cess from 1952-53	0.5
(vi) Others	0.4
TOTAL	2.7

In addition, the State Government has received Rs. 0.3 crore as its share of collections under Estate duty. The State's savings from current revenues declined from Rs. 8.0 crores in 1953-54 to Rs. 2.0 crores in 1954-55 and to Rs. 20.5 crores in 1955-56. This was largely due to increase in expenditure on 'famine' during the last two years and diversion of resources for financing increased development expenditure outside the State Plan, which had risen from Rs. 7 crores in 1951-52 to Rs. 14.3 crores in 1954-55.

@ Represents negative cash balances.

PLAN OUTLAY AND ITS FINANCING

APPENDIX III-3

Financing of State Plans 1951-56

BOMBAY

	1951-52	1952-53				1953-54	1954-55	1955-56 (Revised Estimate)	1956-57 Total	1951-56—Plan	
		(Accounts)									Original	Revised
I	2	3	4	5	6	7	8	9			
1. Plan Expenditure	22.5	28.5	32.3	33.5	39.4	156.2	146.4	159.9			
1.1. Revenue Account.	17.1	21.5	23.8	20.4	22.8	105.6	..	..	
1.2. Capital Account	5.4	7.0	8.5	13.1	16.6	50.6					
2. Budgetary Resources	13.3	28.0	36.1	53.2	36.0	166.6	125.4				
2.1. Balance from revenue account	14.8	12.7	24.1	27.6	23.5	102.7	92.4				
2.2. Loans from public	3.7	3.7	5.5	6.0	10.0	28.9	25.0				
2.3. State trading	(-)11.7	15.0	0.2	7.1	1.7	12.3	..				
2.4. Deposits & other misc. receipts on capital account	6.5	(-)3.4	6.3	12.5	0.8	22.7	8.0				
3. Central assistance for the Plan	1.1	3.8	7.3	4.3	5.2	21.7	16.0				
2.3 State trading account	14.4	31.8	43.4	57.5	41.2	188.3	141.4				
3. Central assistance for the Plan	8.1	(-)3.3	(-)11.1	(-)24.0	(-)1.8	(-)32.1	5.0				
4. Total resources (2+3)	0.8	(-)2.0	..	..	..	(-)1.2					
5. Gap in resources (1-4)	7.8	1.5	(-)8.5	(-)19.2	3.2	(-)15.2					
6. Gap covered by:—											
6.1 Increase in floating debt	(-)0.5	(-)2.8	(-)2.6	(-)4.8	(-)5.0	(-)15.7					5.0

1. The size of the State Plan was increased,

(Rs. crores)		(Rs. crores)	
(i)	Additional power	1.0	
(ii)	Scarcity areas plan to Rs. 159.9 crores as a result of the following adjustments and additions:		
(iii)	Power expansion	4.9	
(iv)	Urban water supply	2.0	
(v)	Rural water supply (Purchase of Canadian Chassis)	3.1	
(vi)	Welfare of backward areas	1.2	
	on	1.3	
	supply	13.5	
	supply		
	TOTAL		

TOTAL 13.5

The entire expenditure on items (i) to (vi) and half the expenditure on item (vi) were to be financed from general sales tax. As a result the State Government

2. The State Government

The entire expenditure on items (i) to (vi) and half the expenditure on item (vi) were to be financed from general sales tax. As a result the State Government

1. There has been marked decline in receipts from State taxes during 1951-53 due largely to lower revenue from general sales tax. As a result of improvement from 1953-54 in the yield from general sales tax, tax on sale of motor spirit and land revenue, receipts under State taxes started looking up from that year and was higher in 1955-56 by about Rs. 10 crores as compared to 1950-51 level of Rs. 35 crores. Receipts from General sales tax has increased by Rs. 6 crores in 1955-56 from 1950-51 level.

3. The State Government is estimated to have raised about Rs. 24.0 crores by way of additional taxation during the First Plan period as shown below:—

	(Rs. crores)
(i) Increase in the rate of motor vehicles tax from October, 1952	3.6
(ii) Increase in the rate of tax on the sale of Motor spirit	16.6
(ii) Increase in the rate of tax on the sale of Motor spirit	16.6
(ii) Conversion of single-point sales tax into double point system	23.6
(ii) Conversion of single-point sales tax into double point system	23.6
TOTAL	43.8

(from April 1, 1951 this was converted into double point system)

In addition, the State Government has received about Rs. 0.4 crore as its share of Estate Duties. Receipts on account of loans from the public in 1954-55 shown in the above statement represent the State Government's share in the proceeds of the National Plan Loan raised during that year.

4. Receipts on account of loans from the public in 1954-55 shown in the above statement represent the State Government's share in the proceeds of the National Plan Loan raised during that year.
5. Surpluses from current revenues above the targets fixed for the five year period are due to substantial improvement in revenues during 1953-56 over the base year 1950-51, and due to maintaining of non-development expenditure (excluding transfer to State Road Fund) and non-plan development expenditure more or less constant.
6. Larger collections from miscellaneous capital heads during 1953-54 and 1954-55 were due to substantial increase in inflows under 'deposits and advances'. The heavy decline in the last year is due to huge net outflow under loans and advances (Rs. 9.2 crores) and repayment of loans to the public (3.3 crores).

APPENDIX III-4

Financing of State Plans 1951-56

MADHYA PRADESH

REVIEW OF THE FIRST FIVE YEAR PLAN

Expenditure	(Rs. crores)									
	1951-52					1952-53				
	(Accounts)					(Accounts)				
1	2	3	4	5	6	7	8	9	10	11
1. Revenue Account	6.5	4.9	7.4	10.0	13.7	42.5	43.1	48.2		
2. Capital Account	3.4	3.5	4.2	6.1	7.6	44.8				
3. Budgetary Resources	3.1	1.4	3.2	3.9	6.1	17.7				
4. Balance from Revenue account	8.6	2.3	11.8	7.9	3.1	33.7	28.1			
5. Loans from Public	7.7	7.5	3.3	2.4	0.6	21.5	22.6			
6. State trading	1.0		1.0	1.2	1.7	4.9	5.0			
7. Deposits and other misc. receipts on capital account	(-) 0.9	(-) 1.7	4.3	2.7	1.1	5.5				
8. Central assistance for the Plan	0.8	(-) 3.5	3.2	1.6	(-) 0.3	1.8	0.5			
9. Total resources (2+3)	1.8	1.5	1.2	4.5	5.9	14.9	12.0			
10. Central assistance for the Plan	10.4	3.8	13.0	12.4	9.0	48.6	40.1			
11. Total resources (2+3)	(-) 3.9	1.1	(-) 5.6	(-) 2.7	4.7	(-) 6.1	3.0			
12. Total resources (2+3)										
13. Gap in resources (1-4)										
14. Gap covered by:-										
15. Increase in floating debt	(-) 1.7	3.1		0.8	1.4	(-) 9.5	3.0			
				(-) 3.2	3.3	3.5				

1. The size of the State Plan was increased on account of the following adjustments and additions :—

(i) Additional power projects	•	•	•	•	•	(Rs. crores.)
(ii) Scarcity areas programme.	•	•	•	•	•	1.0
(iii) Power expansion	•	•	•	•	•	1.0
(iv) Urban water supply	•	•	•	•	•	1.3
(v) Rural water supply	•	•	•	•	•	0.7
(vi) Welfare of backward classes	•	•	•	•	•	0.8
						0.3
						<u>5.1</u>

The entire expenditure on items (i) to (iv) and half the expenditure on item (v) were to be met from additional Central assistance of Rs. 4.4 crores.

2. The State Government has gained about Rs. 85 lakhs per annum as from 1952-53, on account of the recommendations of the Finance Commission.

3. State taxes have risen from Rs. 10.7 crores in 1950-51 to Rs. 12.4 crores in 1955-56 (R.E.) largely under land revenue (owing to the abolition of Zamindari) and under general sales tax.

4. The State Government is estimated to have raised Rs. 2.3 crores by way of additional taxation during the Plan Period as shown below :—

(i) General Sales tax	•	•	•	•	•	2.2
(ii) Revenue from capital transfers (estate duties)	•	•	•	•	•	0.1
						<u>2.3</u>

5. The fall in balance from revenue account during 1954-55 is explained by the fact that during this year an expenditure of Rs. 2.7 crores previously met from capital account for the payment of compensation to Zamindars was written back to revenue account. Decline in balance from revenue account from year to year are explained largely by development expenditure out side the State Plan which has risen from about Rs. 6 crores in 1951-52 to about Rs. 15.7 crores estimated for 1955-56. The total developmental revenue expenditure during 1951-56 amounted to Rs. 72 crores, of which only Rs. 24.8 crores accounted for the Plan outlay.

6. Loans from the public shown for 1954-55 represent the allocation from the proceeds of National Plan Loan raised during the year, to about Rs. 2 crores under deposits and other miscellaneous receipts on capital account in 1952-53 was due mainly to compensation payment amounting to about Rs. 2 crores and repayment of loans amounting to Rs. 2.2 crores.

8. The short fall in the plan expenditure by about 12% was mainly due to (i) lack of sufficient efforts on the part of the State Government to raise their resources through additional taxation. As against the target of Rs. 10.6 crores the State Government raised only Rs. 2.3 crores during the Plan period. (ii) Rise in non-development expenditure on revenue account from Rs. 8.5 crores in 1950-51 to Rs. 12.0 crores in 1955-56. (iii) Increase in non-plan development revenue expenditure mainly during the last two years.

APPENDIX III-5

Financing of State Plans 1951-56

MADRAS

RESIDUARY MADRAS											
COMPOSITE MADRAS											
1951-52 1952-53 1953-54 Total Original 1953-54 1954-55 1955-56 Total 1951-56—Plan											
Accounts Accounts 1st six 24 24 years											
months Years months Estimate Original Revised											
I	2	3	4	5	6	7	8	9	10	11	12
1. Plan Expenditure	25.1	25.3	9.1	59.5	140.8	9.7	14.2	28.2	52.1	78.8	90.2
1.1 Revenue Account	8.0	5.8	3.0	16.8	..	2.0	4.6	6.0	12.6	..	..
1.2 Capital Account	17.1	19.5	6.1	42.7	..	7.7	9.6	22.2	39.5	..	..
2. Budgetary resources	0.9	(-) 13.1	9.1	(-) 3.1	93.8	8.6	7.7	12.0	28.3	..	..
2.1 Balance from revenue account	1.9	(-) 4.7	(-) 5.7	(-) 8.5	76.8	1.0	0.3	3.2	4.5	..	..
2.2 Loans from Public	3.0	5.3	10.5	18.8	17.0	..	5.0	10.5	15.5	..	..
2.3 State trading	2.6	(-) 10.5	16.2	8.3	..	(-) 4.6	3.7	2.3	1.4	..	..
2.4 Deposits and other misc. receipts on capital account	(-) 6.6	(-) 3.2	(-) 11.9	(-) 21.7	..	12.2	(-) 1.3	(-) 4.0	6.9	..	..
3. Central assistance for the Plan	7.6	8.9	2.6	19.1	20.0	2.1	5.7	11.6	19.4	..	..
4. Total resources (2+3)	8.5	(-) 4.2	11.7	16.0	113.8	10.7	13.4	23.6	47.7	..	..
5. Gap in resources (1-4)	16.6	29.5	(-) 2.6	43.5	27.0	(-) 1.0	0.8	4.6	4.4	..	..
6. Gap covered by :—											
6.1 Increase in floating debt	(-) 2.0	15.0	5.5	18.5	..	..	..	..	..	..	..
6.2 Sale of securities held in reserve	18.6	14.5	..	33.1	27.0	(-) 0.1	..	..	(-) 0.1	..	..
6.3 Withdrawal from cash balances . . . . .	..	..	(-) 8.1	(-) 8.1	..	(-) 0.9	0.8	4.6	4.5	..	..

1. The plan outlay figures for the first two and a half years shown here are those of Madras and Andhra (excluding the Bellary area shown in Mysore) as reported by the Residuary States of Madras and Andhra. Figures for the period indicated in the previous Progress Reports included the Outlay for Composite Madras as reported by Composite Madras and was therefore, higher by about Rs. 10.9 crores.

2. Out of the Central assistance of Rs. 20 crores allotted for the five-year period, the Government of Composite Madras received Rs. 19.1 crores during the first half of the plan period. In addition, the State Government obtained ways and means advances of Rs. 26 crores (net) from the Centre during this period.

3. The State Government is estimated to have raised about Rs. 6.4 crores by way of additional taxation during the plan period as shown below:—

	Rs. crores
(i) Receipts from surcharge on land revenue and agricultural income tax on plantation	0.9
(ii) Receipts from increase in irrigation rates	0.1
(iii) Betterment levy	0.2
(iv) General sales tax	0.6
(v) Tax on motor spirit	1.2
(vi) Tax on tobacco, cigarettes and cigars	0.5
(vii) Surcharge on passengers travelling by public transport buses	2.7
TOTAL	6.2

In addition, the State Government has received Rs. 0.2 crores as its share of estate duties.

4. The negative balances from revenue account in 1952-53 and during the first half of 1953-54 are largely attributable to scarcity conditions resulting in partial suspension of revenue collections on the one hand and heavy relief expenditures on the other. Low contributions during 1954-55 and 1955-56 have been due to large revenue deficits and rise in developmental expenditure outside the State Plan.

5. Loans from the public shown for 1954-55 represent allocation from the proceeds of National Plan Loan floated during the year.

6. The heavy outflows during the first half of 1953-54 and inflows during the second half under 'deposits and other miscellaneous capital receipts' are largely accounted for by the following:—

	1st half	2nd half	1953-54
Municipal and other Funds (net)	(-) 1.5	(-) 1.5	(-) 3.0
Civil deposits (net)	(-) 5.7	(-) 3.0	(-) 8.7
Central loans utilised for investment in State trading	(-) 1.5	(-) 0.1	(-) 1.6
Repayment of loans to the public	(-) 2.0	(-) 0.4	(-) 2.4
Loans and advances (net)	(-) 0.7	(-) 0.1	(-) 0.8
Compensation payments and continued value of pensions	(-) 11.4	(-) 8.4	(-) 19.8
TOTAL	(-) 22.8	(-) 13.5	(-) 36.3

7. The negative contribution of Rs. 4 crores on Capital account in 1955-56 has been due to heavy disbursements of loans and advances and outflows under deposits and advances.

APPENDIX III-6

Financial Plan of State Plans 1951-56

ANDHRA

(Rs. crores.)

ANDHRA

	1953-54	1954-55	1955-56	Total	1951-56 - Plan	
		(Accounts) (later half of the year)	(Accounts) (Revised Estimate) (2 1/2 years)		Original	Revised
	2	3	4	5	6	7
I						
1. Plan Expenditure	5.5	15.3	17.4	38.2	54.6	67.1
1.1 Revenue Account	1.8	2.9	3.1	7.8	..	..
1.2 Capital Account	3.7	12.4	14.3	30.4	..	..
2. Budgetary resources :	9.7	0.1	5.1	14.9	..	..
2.1 Balance from revenue accounts	1.1	(-)-2.5	(-)-1.1	(-)-2.5	..	..
2.2 Loans from public . . . . .	..	2.5	5.0	7.5	..	..
2.3 State trading	1.5	0.4	(-)-0.6	1.3	..	..
2.4 Deposits and their miscellaneous receipts on capital account	7.1	(-)-0.3	1.8	8.6	..	..
3. Central assistance for the Plan	3.8	8.1	12.0	23.9	..	..
4. Total resources (2.1-3)	13.5	8.2	17.1	38.8	..	..
5. Gap in resources (1-4)	(-)-8.0	7.1	0.3	(-)-0.6	..	..
6. Gap covered by :—	..	..	..	..	..	..
6.1 Increase in floating debt . . .	..	..	..	..	..	..

	in crores				Composite Madras
	6.2 Sale of securities held in reserve	6.3 Withdrawal from cash balance	7.1	0.3	
1. The outlay of Rs. 26 for this period.					
2. The original plan of the Andhra area during the first two-and-a-half years has been included in the plan of the Andhra area amounting to Rs. 54.6 crores was revised to Rs. 67.1 crores on account of the addition of the following schemes.					
(i) Scarcity areas programmes					5.0
(ii) Power expansion schemes					1.3
(iii) Urban water supply					1.0
(iv) Rural water supply					0.8
(v) Building programmes					1.4
(vi) Other adjustments (net)					3.2
					12.5

The whole of the expenditure on items (i) to (iii) and half of the expenditure on item (iv) were to be met by Central assistance of Rs. 7.7 crores.

3. Receipts from additional taxation measures amounted to Rs. 1.6 crores during the plan period as indicated below :-	(Rs. crores)
(i) Land revenue	0.4
(ii) Increase in irrigation rates	0.4
(iii) General sales-tax	0.2
(iv) Tax on motor spirit travelling by public buses.	0.3
(v) Surcharge on passengers	1.5

In addition, the State Government has received Rs. 0.1 crore as its share of Estate duties.

4. The negative contribution on revenue account during the last two years have been due to the fact that the State Government budgeted for large revenue deficits.

5. Loans from the public shown for 1954-55 represent allocations from the proceeds of the National Plan Loan floated by the Government of India.

6. Inflows of Rs. 7.1 crores under 'deposits and miscellaneous capital receipts' in 1953-54 included Rs. 2.5 crores which the State received from the Government of Madras as its share of the public loan of Rs. 10 crores raised by the Government of Composite Madras in the first half of the year.

APPENDIX III—7

Financing of State Plans (1951-56)

ORISSA

(Rs. Crores)

1951-56—Plan

1951-52 1952-53 1953-54 1954-55 1955-56 (Revised Estimate) 1951-56 (Total) Original Revised

(Accounts)

6 7 8 9

I

1. Plan Expenditure

1.1 Revenue Account

1.2 Capital Account

2. Budgetary resources

2.1 Balance from revenue account

2.2 Loans from public

2.3 State trading

2.4 Deposits and other misc. receipts on account

3. Central assistance for the Plan

4. Total resources (2+3)

5. Gap in resources

6. Gap Covered by :—

6.1 Increase in floating debt

6.2 Sale of securities held in reserve

6.3 Withdrawal from cash balances

	1	2	3	4	5	6	7	8	9
1. Plan Expenditure									
1.1 Revenue Account		2.4	2.7	3.0	4.1	6.1	18.3	17.8	21.2
1.2 Capital Account		1.8	2.0	2.1	1.8	2.8	10.5	..	..
2. Budgetary resources		0.6	0.7	0.9	2.3	3.3	7.8	..	..
2.1 Balance from revenue account		3.3	2.9	1.3	3.8	0.3	11.6	7.3	..
2.2 Loans from public		2.4	2.8	1.1	0.2	(-)-4.3	2.2	..	..
2.3 State trading	
2.4 Deposits and other misc. receipts on account		0.1	..	(-)-1.0	1.8	(-)-0.4	0.5	..	..
3. Central assistance for the Plan		0.5	..
4. Total resources (2+3)		0.8	0.1	1.2	1.8	5.0	8.9	10.6	10.0
5. Gap in resources		1.3	0.9	1.2	2.7	4.5	22.2	17.8	..
6. Gap Covered by :—		4.6	3.8	2.5	6.5	4.8	(-)-3.9	..	..
6.1 Increase in floating debt		(-)-2.2	(-)-1.1	0.5	(-)-2.4	1.3	(-)-1.1	..	..
6.2 Sale of securities held in reserve		0.2	..	..
6.3 Withdrawal from cash balances		(-)-1.1	..	..	(-)-1.5	1.5	(-)-3.0	..	..

1. The size of the Plan was increased on account of the following adjustments and additions :—

	(Rs. crores)
(i) Increase in expenditure on Duduma transmission lines	0.5
(ii) Additional programmes for relieving unemployment	0.7
(iii) Power expansion schemes	0.5
(iv) Rural water supply	1.1
(v) Increase in provision for Machkund Schemes	0.1
(vi) Other adjustments	3.4
TOTAL	3.4

Additional Central assistance of Rs. 1.4 crores was to be made available to the State for financing the expenditure on items (ii) & (iii) and half the expenditure on item (iv).

2. The State Government has gained about Rs. 1.7 crores per annum as from 1952-53 on account of the recommendations of the Finance Commission.

3. Receipts from State taxes have risen from Rs. 5.1 crores in 1950-51 to Rs. 5.7 crores in 1955-56 (R.E.) largely due to the enhancement of rates of general sales tax in 1951-52, and the imposition of purchase tax in 1954-55. These two measures are expected to have yielded Rs. 2.0 crores during the First Plan Period.

4. The negative contribution from revenue account in 1955-56 is due to increase in expenditure on general administration and on development expenditure outside the State Plan which has risen from Rs. 4.4 crores in 1951-52 to Rs. 12.5 crores in 1955-56 and due to heavy expenditure of about Rs. 3.4 crores on famine relief.

5. The repayment of ways and means advances in 1951-52 represents the clearance of a negative cash balance of Rs. 112 lakhs.

APPENDIX III-8

Financing of State Plans 1951-50

PUNJAB

	(Rs. crores)									
	1951-52	1952-53	1953-54	1954-55	1955-56	1951-56	1951-56—Plan			
	(Accounts)				(Revised Estimate)	(Total)	Original	Revised		
1	2	3	4	5	6	7	8	9		
1. Plan Expenditure	2.7	3.2	7.3	8.5	10.1	31.8	20.2	34.4		
1.1 Revenue Account	0.9	1.1	1.3	1.4	1.5	6.2	..	..
1.2 Capital Account	1.8	2.1	6.0	7.1	8.6	25.6	..	..
2. Budgetary resources	(-)5.5	(-)1.4	1.0	8.3	(-)1.1	1.3	8.6	..		
2.1 Balance from Revenue account	2.6	2.9	2.1	3.6	(-)1.4	9.8	1.1	..		
2.2 Loans from public	..	..	..	..	..	..	..	..
2.3 State trading	(-)2.2	1.5	1.7	1.2	0.2	2.4	..	..
2.4 Deposits and other misc. receipts on capital account	(-)5.9	(-)5.8	(-)2.8	3.5	0.1	(-)10.9	7.5	..		
3. Central assistance for the Plan	0.5	0.6	1.2	7.1	7.1	16.5	11.0	..		
4. Total resources (2+3)	(-)5.0	(-)0.8	2.2	15.4	6.0	17.8	19.6	..		

5. Gap in resources	.	.	.	.	.	7.7	4.0	5.1	(-)-6.9	4.1	14.0	0.6
6. Gap covered by :—												
6.1 Increase in floating debt.	.	.	.	.	.	..	..	..	..	..	..	..
6.2 Sale of securities held in reserve	.	.	.	.	.	(-)-0.5	(-)-0.5	0.9	1.0	(-)-4.0	(-)-3.1	0.6
6.3 Withdrawal from cash balances.	.	.	.	.	.	8.2	4.5	4.2	(-)-7.9	8.1	17.1	

1. The size of the Plan was increased to Rs. 34.4 crores on account of the following adjustments and additions :—

	(Rs. crores)
Additional road programme	2.4
Additional provision for power	5.1
Agriculture and Rural development	1.8
Urban and rural water supply	1.2
Irrigation	1.1
Miscellaneous Adjustments	2.6
	<hr/> 14.2 <hr/>

Of the increase in expenditure of Rs. 14.2 crores, Rs. 6 crores represent schemes which were already being financed from the State's revenue accounts. Additional Central assistance of Rs. 6.7 crores were to be made available to the State Government for financing the increased outlay on the Plan and the balance was to be met by the State's own resources.

2. The State Government has gained about Rs. 40 lakhs per annum as from 1952-53 on account of the recommendations of the Finance Commission.

3. Receipts from State taxes during the Plan period was higher than five times the 1950-51 level by about Rs. 8.3 crores of which Rs. 4.5 crores was due to additional measures of taxation adopted by the State Government. The details are as shown below :—

APPENDIX III-8—*contd.*

<i>Estimated yield during 1951-56</i>									
<i>(Rs. crores)</i>									
(i) Passengers and goods tax (1952)	.	.	.	.	.	.	.	.	1.7
(ii) General sales-tax, stricter supervision and tightening of Administration (1953-54)	.	.	.	.	.	.	.	.	1.4
(iii) Revision of land revenue	.	.	.	.	.	.	.	.	0.9
(iv) Motor vehicles tax	.	.	.	.	.	.	.	.	0.2
(v) Miscellaneous	.	.	.	.	.	.	.	.	0.2
TOTAL									4.4

In addition, State Government has received Rs. 0.1 crore as its share of estate duties.

4. The negative balance from revenue account in 1955-56 is due to (i) heavy relief expenditure (Rs. 3.9 crores), (ii) transfer of about Rs. 1.0 crore to development fund and (iii) increase in non-plan development expenditure which has risen from Rs. 5.5 crores in 1951-52 to Rs. 12.2 crores in 1955-56.

5. Heavy out-flows during 1951-54 under deposits and other misc. receipts are accounted for by repayments of loans to the Centre and outgoes under remittances as a result of settlement of accounts carried over from the pre-plan period. Repayment of Central loans during this period amounted to Rs. 9.1 crores and net outgoes under remittances of Rs. 11.0 crores. The low contribution from capital account in 1955-56 is due to heavy disbursement of loans and advances and outgoes under deposit and advances.

APPENDIX III-9

Financing of State Plans 1951-56

UTTAR PRADESH

PLAN OUTLAY AND ITS FINANCING

65

(Rs. Crores)									
		1951-52	1952-53	1953-54	1954-55	1955-56 Revised Estimates	1951-56 (Total)	1951-56—Plan Original	Revised
		(Accounts)							
1		2	3	4	5	6	7	8	9
1.	Plan Expenditure	.	.	.	.	.	.	.	.
	1.1 Revenue Account	15.4	19.4	21.8	24.2	24.7	105.5	97.8	129.8
	1.2 Capital Account	9.1	9.2	9.0	9.2	10.2	46.7	..	..
	Budgetary resources	6.3	10.2	12.8	15.0	14.5	58.8	..	..
2.	2.1 Balance from revenue account	8.1	16.2	30.7	20.0	9.9	84.9	82.8	..
	2.2 Loans from public	8.8	6.1	11.7	9.3	7.2	43.1	71.3	..
	2.3 State trading	2.0	5.6	5.7	3.0	9.5	25.8	5.0	..
	2.4 Deposits and other misc. receipts on capital account	(-)	3.3	0.5	1.4	0.5	3.2	..	..
3.	Central assistance for the Plan	0.6	4.0	9.2	6.3	(-)	7.3	6.5	..
4.	Total resources (2+3)	3.1	1.6	6.3	5.7	10.4	27.1	15.0	..
		11.2	17.8	37.0	25.7	20.3	112.0	97.8	..

APPENDIX III-9—contd.

APPENDIX III-9—contd.									
1951-56—Plan									
1951-56									
Total									
Original Revised									
Estimates									
1951-52 1952-53 1953-54 1954-55 1955-56 Revised Estimates									
Accounts									
1 2 3 4 5 6 7 8 9									
I									
5. Gap in resources									
6. Gap covered by :—									
6.1 Increase in floating debt									
6.2 Sale of securities held in reserve									
6.3 Withdrawal from cash balances									
1. The size of the Plan was increased on account of the following additions and adjustments:—									
(i) Scarcy areas programmes									
(ii) Power expansion for increasing employment									
(iii) Urban water supply									
(iv) Rural water supply									
(v) T.C.A. tubewells									
(Rs. crores)									

(vii) Other adjustments (net)

The entire expenditure on items (i) to (iii) and half the expenditure on item (iv) was to be met by additional Central assistance.

2. The State Government has gained about Rs. 3 crores per annum as from 1952-53 on account of the recommendations of the Finance Commission.

3. Receipts from State taxes during the Plan period were Rs. 49.1 crores larger than five times the 1950-51 level. Of this, about Rs. 41.5 crores are accounted for by increase in land revenue as a result of the zamindari abolition. This increase has, however, been partly offset by revenue expenditure connected with the abolition of zamindari and transfers to the zamindari abolition fund.

4. The State Government is estimated to have raised about Rs. 11.0 crores during 1951-56 from the following additional measures of taxation :—

	<i>Estimated yield during 1951-56</i>
	(Rs. crores)
(i) General sales-tax-enhancement of rates and coverage (1952-53 and 1953-54).	0.6
(ii) Enhancement of stamp duties (1952-53)	1.2
(iii) Increase in electricity rates (Jan. 1953)	2.6
(iv) Increase in irrigation rates by 50 per cent (1953-54)	4.8
(v) Increase in registration rates of motor vehicles	1.4
	<hr/> 10.6

In addition the State Government has received Rs. 0.4 crores as its share of estate duties.

5. Loans from the public shown for 1954-55 represent allocation from the National Plan Loan receipts.

6. The outflow under deposits and other misc. capital receipts in the last year is largely attributable to the following items :—

	<i>1955-56 (Revised estimate)</i>
	(Rs. crores)
Net outflow under loans and advances	9.7
Compensation payments to ex-zamindars	4.7
Transfer of Revenue reserve fund to the revenue account	2.6
	<hr/> 17.0

APPENDIX III-10
Financing of State Plans 1951-56
WEST BENGAL

	(Rs. crores)								
	(Accounts)					1955-56 (Revised Estimate)	1951-56 (Total)	1951-56—Plan	
	1951-52	1952-53	1953-54	1954-55				Original	Revised
1	2	3	4	5	6	7	8	9	
1. Plan Expenditure	10.2	12.1	15.9	14.5	21.9	74.6	69.1	76.5	
1.1. Revenue Account	5.7	5.8	7.5	7.5	11.5	38.0	..	..
1.2. Capital Account	4.5	6.3	8.4	7.0	10.4	36.6	..	..
2. Budgetary resources	7.1	7.6	5.3	4.8	12.4	37.2	42.6		
2.1. Balance from revenue account	6.6	4.1	1.0	0.7	(—)3.9	8.5	27.6		
2.2. Loans from public	1.7	2.0	3.6	4.0	7.6	18.9	10.0		
2.3. State trading	0.3	1.9	(—)3.3	(—)4.1	7.4	2.2	..		
2.4. Deposits and other misc. receipts on capital account	(—)1.5	(—)0.1	4.0	4.2	1.3	7.6	5.0		
3. Central assistance for the Plan	3.2	2.3	6.7	10.6	11.4	34.2	26.5		
4. Total resources (2+3)	10.3	9.9	12.0	15.4	23.8	71.4	69.1		

APPENDIX III-10—contd.

effect on State excise revenue having offset

decline in State excise revenue.

decline in State excise revenue.

Estimated yield, 1951-56

(Rs. crores)

2.9

1.2

4.1

TOTAL

3. Receipts from State taxes have remained more or less steady at about Rs. 2.2 crores per annum, decline in State excise revenue having offset small increases under certain other heads. In 1955-56, the receipts have risen to more than Rs. 2.5 crores, mainly under land revenue.

4. The State Government is estimated to have raised about Rs. 4.5 crores during 1951-56, from the following measures of additional taxation:—

(i) Enhancement of motor vehicles tax (July) 1951

(ii) General Sales tax-tightening of administration

(iii) General Sales tax-tightening of administration

(iv) General Sales tax-tightening of administration

(v) General Sales tax-tightening of administration

(vi) General Sales tax-tightening of administration

(vii) General Sales tax-tightening of administration

(viii) General Sales tax-tightening of administration

(ix) General Sales tax-tightening of administration

(x) General Sales tax-tightening of administration

(xi) General Sales tax-tightening of administration

(xii) General Sales tax-tightening of administration

(xiii) General Sales tax-tightening of administration

(xiv) General Sales tax-tightening of administration

(xv) General Sales tax-tightening of administration

In addition the State Government has received Rs. 0.4 crore as its share of estate duties.

5. The negative balance from revenue account in 1955-56 is due to increased developmental expenditure outside the State Plan which has

been met from about Rs. 11 crores in 1951-52 to 17.4 crores in 1954-55 and to Rs. 23 crores in 1955-56 and partly by increased expenditure on food

subsidies, famine relief etc.

6. Loans from the public shown for 1954-55 represent allocation from the National Plan Loan proceeds.

7. Outflows under deposits and other miscellaneous receipts in the first two years are explained by the settlement of transactions carried over from the pre-Plan period.

APPENDIX III-II

Financing of State Plans 1951-56

HYDERABAD

(Rs. Crores)

	1	1951-52	1952-53	1953-54	1954-55	1955-56 (Revised Estimate)	1951-56 (Total)	Original	Revised
		(Accounts)							
		2	3	4	5	6	7	8	9
1. Plan Expenditure	.	6.4	6.5	6.5	6.9	8.1	34.4	41.6	47.0
1.1 Revenue Account	.	0.7	1.0	1.7	1.9	2.5	7.8	..	..
1.2 Capital Account	.	5.7	5.5	4.8	5.0	5.6	26.6	..	..
2. Budgetary resources	.	6.7	0.8	(-)0.4	3.1	(-)0.7	9.5	24.6	..
2.1 Balance from revenue account	.	2.3	2.3	0.5	0.8	(-)1.1	4.8	17.0	..
2.2 Loans from public	3.2	4.5	2.1	9.8	6.0	..
2.3 State Trading	.	(-)0.6	1.0	0.7	(-)0.9	(-)0.1	0.1	..	..
2.4 Deposits and other misc. receipts on capital account.	.	5.0	(-)2.5	(-)4.8	(-)1.3	(-)1.6	(-)5.2	1.6	..
3. Central assistance for the Plan	..	1.6	3.5	4.0	5.2	4.6	18.9	10.0	..
4. Total resources (2+3)	.	8.3	4.3	3.6	8.3	3.9	28.4	34.6	..

APPENDIX III-11—*contd.*

(Rs. crores)

	1951-52 1952-53 1953-54 1954-55				1955-56 (Revised) Estimate	1951-56 (Total)	1951-56 Plan	
	(Accounts)						Original	Revised
1	2	3	4	5	6	7	8	9
5. Gap in resources		(-)-1.9	2.2	2.9	(-)-1.4	4.2	6.0	7.0
6. Gap covered by :-								
6.1 Increase in floating debt		0.1	..	..	(-)-3.1	..	(-)-3.0	..
6.2 Sale of securities held in reserve . . . . .		..	..	1.3	1.0	..	2.3	7.0
6.3 Withdrawal from cash balances		(-)-2.0	2.3	1.6	0.7	4.2	6.7	
1. The size of the Plan was increased on account of the following additions :-								
	(Rs. crores)							
(i) Roads							1.2	
(ii) Scarcity areas programme							3.0	
(iii) Power expansion scheme							0.4	
(iv) Urban water supply							0.3	
(v) Rural water supply							0.5	
								5.4

ance.

The entire expenditure on items (i) to (iv) and half the expenditure on item (v) was to be met from additional Central assistance. 2. The State Government has gained about Rs. 2.3 crores per annum as from 1952-53 on account of the recommendations of the Finance Commission. 1955-56. The

in 1955-56. The increase in revenue from sales tax and certain other heads has been more than offset by the fall in receipts under State excise and particularly by the abolition of inter-State transit duties which yielded Rs. 4 crores in 1951-52

3. Revenue from State taxes has fallen from Rs. 20.4 crores in 1951-52 to Rs. 16.4 crores in 1955-56. The increase in revenue from sales tax and certain other heads has been more than offset by the fall in receipts under State excise and particularly by the abolition of inter-State transit duties which yielded Rs. 4 crores in 1951-52

Estimated yield during 1951-56

(Rs. crores)

(i) Enhancement of sales tax on motor spirit	0.3
(ii) Cess on sugarcane and entertainment tax	0.4
(iii) Miscellaneous measures	0.3
Total	1.0

4. The State Government is estimated to have raised about Rs. 1 crore from the following additional measures of taxation during 1951-56 :—

5. The negative balance from revenue account in 1955-56 is due to increase in developmental expenditure outside the State Plan, payment of compensation to Jagirdars, and fall in tax receipts.

6. Inflow of Rs. 5 crores in 1950-51 under deposits and other miscellaneous receipts is explained by the settlement of transactions carried forward from the pre-Plan period. Outflows in the coming years are largely due to increase in loans to agriculturists and a loan of Rs. 5 crores in 1953-54 to the Hyderabad State Bank and in the later years due to increased repayment of loans to the centre and disbursements under remittances.

(Rs. Crores)

Financing of State

[illegible]

1. The size of the Plan was increased on account of the following additions and adjustments :

	(Rs. crores)
(i) Additional power projects	0.6
(ii) Additional roads programme	0.8
(iii) Urban water supply	0.2
(iv) Adjustments under original schemes (net)	(—) 1.4
TOTAL	0.2

1. The Outlay on items (i) to (iii) above was to be financed by additional Central assistance.

2. Central assistance of Rs. 4 crores originally allocated for the State Plan was subsequently increased by Rs. 1.8 crores in view of the State's additional needs. This was raised further to Rs. 7.4 crores on account of the additions to the Plan listed above.

3. The State Government has gained Rs. 1.4 crores per annum as from 1952-53 on account of the recommendations of the Finance Commission. The Gadgil Committee has awarded a grant of Rs. 2 crores to the State, Rs. 1 crore to be adjusted against Central loans assistance for the Plan and Rs. 1 crore to be treated as an *ad hoc* grant. The State Government has utilised only Rs. 1.3 crores during the Plan Period.

4. Receipts from State taxes as compared to the pre-Plan year have increased by Rs. 6 crores over the Plan period mainly under land revenue and general sales tax, which however, has been partly offset by decline in yield from State excise and inter-State transit duties. The latter yielded Rs. 1.4 crores in 1950-51 and Rs. 1 crore in 1954-55. This duty has been abolished with effect from 1955-56.

5. The State Government is estimated to have raised additional revenue of about Rs. 2.7 crores from new taxes during 1951-56 as shown below:—

	(Rs. crores)
(i) Additional collections from general sales tax after offsetting decreases under customs	2.1
(ii) Increase in yield from forests	0.6
TOTAL	2.7

6. Loans from the public shown for 1954-55 represent allocations from the National Plan Loan proceeds.

APPENDIX III-13

Financing of State Plans (1951-56)

MYSORE

REVIEW OF THE FIRST FIVE YEAR PLAN

	1	2	3	4	5	6	7	1951-56—Plan	
								Original	Revised
	(Accounts)	(Accounts)	(Accounts)	(Accounts)	(Accounts)	(Revised Estimate)	(Total)	8	9
1. Plan Expenditure									
1.1 Revenue Account		7.2	8.3	7.8	9.0	10.8	43.1	36.6	49.7
1.2 Capital Account		3.0	3.0	3.3	2.0	1.8	13.1	..	..
1.3 Capital Resources		4.2	5.3	4.5	7.0	9.0	30.0	27.1	13.1
2. Budgetary Resources		5.5	3.5	3.2	1.6	..	27.5	9.7	9.0
2.1 Balance from revenue account		2.4	..	3.7	1.5	..	8.5	4.7	..
2.2 Loans from public		0.3	(-) 0.3	3.9	1.1	(-) 0.7	4.6	5.0	8.0
2.3 State Trading		2.8	(-) 2.5	2.7	6.2	5.6	18.9	35.1	1.5
2.4 Deposits and other misc. receipts on capital account		2.4	2.0	16.9	11.4	7.5	(-) 3.3	..	..
2.5 State Trading		7.9	2.7	(-) 9.1	(-) 2.4	3.3	..	..	1.5
2.6 Deposits and other misc. receipts on capital account		(-) 0.7	5.6	(-) 9.1	(-) 2.4	..	(-) 5.4	..	1.5
3. Central assistance (2-3)	
4. Total resources (1-4)		3.4	(-) 3.4	(-) 1.8	(-) 0.7	4.0	2.1
5. Gap in resources (1-4)		0.9	(-) 3.6	(-) 1.8	4.0	2.1	..
6. Gap covered by :-		..	(-) 0.2	1.3	(-) 2.1	(-) 0.6	..	..	..
6.1 Increase in floating debt		..	(-) 0.5	..	..	..	..	..	..
6.2 Sale of securities held in reserve	
6.3 Withdrawal from cash balances	

In the previous progress reports outlay

for Bellary also.

1. The outlay for the first three years shown in this statement includes Rs. 4.4 crores for Bellary also.

for the Bellary area for the first two and a half years was included in that of composite Madras.

2. The size of the Plan was increased on account of the following additions and adjustments :—

(Rs. Crores)

(i) Government procelain factory . . .	0.6
(ii) Scarcity areas programme . . .	3.5
(iii) Power expansion scheme . . .	1.5
(iv) Urban Water supply . . .	0.8
(v) Development scheme in Bellary to be financed after its merger with Mysore . . .	1.7
(vi) Rural Water supply . . .	0.6
(vii) Other heads (Net) . . .	4.4
Total . . .	13.1

Additional Central assistance of Rs. 6.7 crores was to be made available to the State-Government to finance the increases in expenditure. The entire expenditure on items (ii) to (iv) and half the expenditure on item (vi) was to be met from the above amount.

3. As the State's share of the Central pool of divisible taxes was less than the guaranteed revenue gap grant, the State continued to receive the latter. In addition, it received as from 1952-53 a general grant-in aid of Rs. 40 lakhs per annum.

4. The State Government is estimated to have raised about Rs. 3.0 crores from additional taxation measures during 1951-56. This however, been largely offset by decline in yield from State excise.

5. The negative balance from revenue account in 1955-56 is mainly due to the increase in non-plan developmental expenditure which has gone up from Rs. 6.7 crores in 1953-54 to Rs. 10.7 crores in 1955-56, and due to increased expenditure under direct demands on revenue.

6. Loans from the public shown for 1954-55 represent allocations from the National Plan Loan proceeds.

(Rs. Crores)

[illegible]

APPENDIX III—15

Financing of State Plans 1951-56

RAJASTHAN

(Rs. Crores)

	1951-52	1952-53	1953-54	1954-55	1955-56	1951-56	1951-56—Plan
	(Accounts)	(Accounts)	(Accounts)	(Accounts)	(Revised Estimate)	(Total)	Original Revised
	2	3	4	5	6	7	8 9
1. Plan Expenditure							
1.1 Revenue Account	2.0	2.2	3.4	5.0	7.7	20.3	16.8 25.5
1.2 Capital Account	1.1	1.5	1.3	1.5	1.6	7.0	.. ..
1.2 Capital Account	0.9	0.7	2.1	3.5	6.1	13.3	.. ..
1.2 Capital Account	(-) 2.5	(-) 0.6	3.5	2.1	(-) 0.9	1.6	4.6
1.2 Capital Account	0.3	3.4	1.4	2.8	(-) 1.3	6.6	4.6
2. Budgetary resources							
2.1 Balance from revenue account	..	..	..	..	..	..	.. ..
2.2 Loans from public	(-) 4.2	1.5	0.1	(-) 0.4	0.6	(-) 2.4	.. ..
2.3 State trading	1.4	(-) 5.5	2.0	(-) 0.3	(-) 0.2	(-) 2.6	.. ..
2.4 Deposits and other misc. receipts on account	0.5	1.0	1.6	4.3	6.2	13.6	9.0
3. Central assistance for the Plan	(-) 2.0	0.4	5.1	6.4	5.3	15.2	13.6
4. Total resources (2+3)	4.0	1.8	(-) 1.7	(-) 1.4	2.4	5.1	3.2
5. Gap in resources (1-4)							
6. Gap covered by:							
6.1 Increase in floating debt.	2.5	(-) 0.1	(-) 2.0	(-) 1.1	2.5	1.8	.. ..
6.2 Sale of securities held in reserve	0.7	1.5	(-) 0.1	..	(-) 0.2	1.9	.. ..
6.3 Withdrawal from cash balances	0.8	0.4	0.4	(-) 0.3	0.1	1.1	3.2

(Rs. Crores)

1. The size of the Plan was increased on account of the following adjustments and additions :—

(i) Rajasthan Thermal Station	2.5
(ii) Additional Roads programme	1.0
(iii) Additional Agricultural schemes	1.0
(iv) Scarcity areas programme	2.5
(v) Power expansion	0.8
(vi) Urban water supply	0.3
(vii) Rural water supply	0.2
(viii) Other miscellaneous adjustments (net)	0.4
	<u>8.7</u>
TOTAL	8.7

(viii) Other miscellaneous adjustments (net) TOTAL 8.7

The entire expenditure on items (ii), (iv), (v) and (vi), half the expenditure on item (vii) and Rs. 0.4 crore on item (viii), were to be financed by additional Central assistance of Rs. 5.1 crores.

2. The State Government gained about Rs. 2.8 crores per annum as from 1952-53 on account of the recommendations of the Finance Commission. It has also benefited to the extent of Rs. 3 crores which it received by way of grants from the Centre as a result of the Gadgil Committee's Award. Of this, Rs. 1.5 crores was adjusted against Central loan assistance originally allocated for the State Plan and the balance treated as an *ad hoc* grant. The State Government has utilised only Rs. 2.1 crores during the Plan period.

3. The State Government is estimated to have raised about Rs. 2.6 crores by way of additional measures of taxation during 1951-56 mainly from increase in tax on motor spirit, land revenue, irrigation rates and introduction of sales tax. General sales tax was introduced in the State upto 1954-55 and it yielded Rs. 1.5 crores during the Plan period. But inter-State transit duties which yielded about Rs. 4 crores upto 1954-55 per annum were abolished with effect from 1955-56.

4. The increase in balance from revenue account in 1952-53 is attributable to the gain from the Finance Commission's Award. Negative balance in 1955-56 is due mainly to increase in development expenditure outside the State Plan, which has risen from Rs. 6.0 crores in 1951-52 to Rs. 11.2 crores in 1955-56, increased expenditure under direct demands on revenue and fall in tax receipts.

5. Heavy outflows under deposits and other miscellaneous capital receipts in 1952-53 are largely explained by the followings :—

(i) Loans to cultivators and for rehabilitation	0.5
(ii) Accounts current with States	1.8
(iii) Remittances	1.4
(iv) Suspense	1.7
TOTAL	<u>5.4</u>

APPENDIX III-16

Financing of the State Plans 1951-56

SAURASHTRA

(Rs. crores)

	(Accounts)					1951-56—Plan			
	1951-52	1952-53	1953-54	1954-55	1955-56 (Revised Estimate)	1951-56 (Total)	Original	Revised	
	2	3	4	5	6	7	8	9	
1. Plan Expenditure									
1.1 Revenue Account	2.9	4.0	3.1	5.2	10.6	25.8	20.4	27.2	
1.2 Capital Account	1.3	1.7	1.6	2.7	4.0	11.3	..	..
	1.6	2.3	1.5	2.5	6.6	14.5	..	..
	1.6	0.5	3.1	7.0	4.0	16.2	12.4	..	
2. Budgetary resources									
2.1 Balance from revenue account	(-)0.3	(-)0.4	3.6	1.3	(-)0.1	4.1	9.9		
2.2 Loans from public	..	..	1.1	4.0	3.6	8.7	..	..
2.3 State trading	(-)0.2	3.0	0.6	0.9	0.7	5.0	..	..
2.4 Deposits and other misc. receipts on capital account	2.1	(-)2.1	(-)2.2	0.8	(-)0.2	(-)1.6	2.5		
3. Central assistance for the Plan									
4. Total resources (2+3)	0.6	1.1	1.5	2.6	4.5	10.3	6.0		
5. Gap in resources (1-4)	2.2	1.6	4.6	9.6	8.5	26.5	18.4		
6. Gap covered by:—	0.7	2.4	(-)1.5	(-)4.4	2.1	(-)0.7	2.0		
6.1 Increase in floating debt	0.8	1.3	(-)2.1	..	..	..	..
6.2 Sale of securities held in reserve	(-)1.3	1.6	0.7	(-)1.1	(-)0.5	(-)0.6	2.0		
6.3 Withdrawal from cash balances	1.2	(-)0.5	(-)0.1	(-)3.3	2.6	(-)0.1	..		

1. The size of the Plan has been increased on account of the following adjustments and additions :—

	(Rs. crores)
(i) Scarcity areas programme	3.3
(ii) Additional provision for roads	1.0
(iii) Power expansion scheme	1.5
(iv) Urban water supply	0.5
(v) Rural water supply	0.8
(vi) Other miscellaneous adjustments (net)	(-)-0.3
TOTAL	6.8

The entire expenditure on items (ii) to (iv) and Rs. 2.5 crores item (i) and half the expenditure on item (v) were to be met by additional Central assistance.

2. As the State's share of the Central pool of divisible taxes was less than the guaranteed revenue gap grant, the State continued to receive latter. In addition, it received as from 1952-53 a general grant-in-aid of Rs. 40 lakhs per annum.

3. The State Government was to receive additional grant of Rs. 1.9 crores as a result of the Gadgil Committee's Award. Of this, Rs. 1 crore was to be adjusted against Central loan assistance originally allocated for the State Plan and the balance given as an *ad hoc* grant. During the Plan period, the State is estimated to have utilised about Rs. 1.2 crores only.

4. The State Government is estimated to have raised about Rs. 2.1 crores from additional measures of taxation during 1951-56, mostly through the introduction of general sales tax in 1953-54 in place of the existing tax on selected commodities.

5. The negative balance from revenue account in the first two years were largely due to partial suspension of revenue collections on account of scarcity conditions and larger expenditures on famine relief and in 1955-56 due to increase in development expenditure outside the State Plan and fall in tax receipts under land revenue and inter-State transit duties.

6. Loans from the public shown for 1954-55 consist of Rs. 1.5 crores allocated to the State from the National Plan loan proceeds and Rs. 2.5 crores raised for the development programme of Local Bodies.

7. Outflows under deposits and other miscellaneous capital receipts during 1952-54 are largely explained by outgoes on account of transactions with part B States and in 1955-56 due to heavy disbursement of loans and advances.

APPENDIX III-17

Financing of State Plans 1951-56

TRAVANCORE-COCHIN

(Rs. crores)

REVIEW OF THE FIRST FIVE YEAR PLAN

APPENDIX II

Financing of State Plans 1951-56

(Rs. crores)

TRAVANCORE-COCHIN

1951-52 1952-53 1953-54 1954-55 1955-56 (Revised Estimate) 1951-56 (Total) Original Revised

	1	2	3	4	5	6	7	8	9
I									
1. Plan Expenditure									
1.1 Revenue Account		4.0	4.7	5.0	4.8	7.6	26.1	27.3	31.3
1.2 Capital Account		1.1	1.7	1.5	2.3	3.4	10.0	..	..
Budgetary resources		2.9	3.0	3.5	2.5	4.2	16.1	..	..
2.1 Balance from public		1.5	(-)0.3	3.5	7.1	1.8	13.6	18.3	..
2.2 Loans from public		5.2	2.0	3.7	7.0	1.4	19.3	14.3	..
2.3 State trading		3.3	..	..	3.3	2.0	..
2.4 Deposits and other misc. receipts on capital account		(-)3.8	(-)0.8	(-)1.0	..	0.2	(-)5.4	..	..
Central assistance for the Plan		0.2	(-)3.6	2.0	..
3. Central assistance (2+3)		0.1	0.2	10.3	7.0	..
4. Total resources (1+3)		0.1	(-)1.5	(-)2.5	3.5	3.6	23.9	25.3	..
5. Gap in resources (1-3)		0.5	0.2	2.5	10.6	5.4	2.2	2.0	..
6. Gap covered by :-		2.0	(-)0.1	6.0	(-)5.8	2.2	..	..	..
6.1 Increase in floating debt		2.0	4.8	(-)1.0	(-)3.1	..	..	..	..
6.2 Sale of securities held in reserve		..	5.1	(-)2.0	0.2	(-)0.9	(-)0.9	3.1	2.0
6.3 Withdrawal from cash balances		..	0.3	(-)0.5	(-)2.9	3.1	3.1	3.1	..
6.4 Total resources (5-6)		1.5	(-)2.9	..	..	..	..
6.5 Gap in resources (1-4)	
6.6 Increase in floating debt	
6.7 Sale of securities held in reserve	
6.8 Withdrawal from cash balances	

1. The size of the plan was increased on account of the following additions and adjustments:—

	(Rs. crores)
(i) Revision in cost estimate of existing irrigation schemes	1.0
(ii) Additional power schemes	1.5
(iii) Miscellaneous schemes for relieving unemployment	1.6
(iv) Urban water supply	0.8
(v) Rural water supply	0.5
(vi) Downward revision under Forests, Road Transport and Ports and Harbours	(—)1.4
TOTAL	4.0

2. Increase in expenditure on account of items (i) to (vi) above was to be met by additional Central assistance of Rs. 4.3 crores.

3. As the State's share of the divisible pool of Central taxes was lower than the guaranteed revenue gap grant, the State continued to receive the latter.

4. Receipts from State taxes over the Plan period were larger than five times the 1950-51 level by about Rs. 4.8 crores.

	(Rs. crores)
(i) Larger receipts from forests as compared with 1950-51 level	1.3
(ii) Larger receipts from agricultural income-tax as compared with 1950-51 level	2.7
(iii) Larger receipts from mining as compared with 1950-51 level	0.8
(iv) Avoidance of loss under excise revenue anticipated earlier	0.3
(v) Licence fee on sale of tobacco	0.7
(vi) Yield from other miscellaneous measures	0.2
TOTAL	6.0

5. The heavy fall 'under 'balance from revenue account' in 1955-56 is accounted for by the increase in development expenditure outside the State Plan which rose from Rs. 6.3 crores in 1951-52 to Rs. 11 crores in 1955-56.

APPENDIX III—18

Financing of State Plans 1951-56

JAMMU & KASHMIR

(Rs. crores)

Financing of State Plan

JAMMU & KASHMIR

REVIEW OF THE FIRST

	1951-52	1952-53	1953-54	1954-55	1955-56 (Revised Estimate)	1951-56 (Total)	1951-56- Plan Original Revised
	(Accounts)						
	2	3	4	5	6	7	8
I							
Plan Expenditure							
1.1 Revenue Account	0.9	1.2	1.6	3.1	4.3	11.1	12.7
1.2 Capital Account	0.4	0.3	0.5	0.7	0.9	2.8	..
Budgetary resources							
2.1 Balance from public	0.5	0.9	1.1	2.4	3.4	8.3	..
2.2 Loans from public	0.6	0.6	(-)0.2	1.6	(-)0.2	2.4	3.0
2.3 State trading	0.3	0.4	0.5	1.0	0.6	2.8	..
2.4 Deposits and other misc. receipts on capital account	0.3	..	..	..	..	..	..
2.5 Central assistance for the Plan	..	..	..	..	..	..	..
3. Total resources (2-1-3)	(-)0.2	0.2	(-)0.7	0.6	(-)0.8	(-)0.4	10.0
4. Gap in resources (1-1)	..	0.9	1.3	2.3	3.0	8.0	13.0
5. Gap covered by :-							
6.1 Increase in floating debt	..	1.1	1.5	3.9	2.8	10.4	..
6.2 Sale of securities held in reserve	..	(-)0.3	0.5	(-)0.8	1.5	0.7	..
6.3 Withdrawal from cash balances	..	..	..	..	..	..	..
6.4 Gap covered by :-							
6.5 Increase in floating debt	..	..	..	..	..	..	..
6.6 Sale of securities held in reserve	..	(-)0.2	(-)0.3	0.5	(-)0.8	1.5	0.7
6.7 Withdrawal from cash balances	..	..	..	..	..	..	..

CHAPTER III

PROGRAMME FOR AGRICULTURE

PROGRAMMES of agricultural development were given the highest priority in the First Five Year Plan. These included programmes for increasing agricultural production, developing animal husbandry and dairying, forests, fisheries and cooperation. In some measures, activities in these different fields benefited from the greater attention given to agriculture, but the bulk of the resources were devoted to the increase of agricultural production. The main emphasis in national extension and community projects was also intended to be on agricultural production. As was stated in the First Five Year Plan:

‘The organisation of extension services with the object of securing increased production and raising the standard of village life is a new undertaking. Extension is a continuous process designed to make the rural people aware of their problems, and indicating to them ways and means by which they can solve them. It thus involves not only education of the rural people in determining their problems and the methods of solving them, but also inspiring them, towards positive action in doing so.’

It is of course recognised that the coverage of the national extension service and community projects programme during the first five year plan was relatively small, but as the movement spreads, its influence on agricultural production is likely to grow.

2. After additions and adjustments the Plan provided Rs. 354 crores for agriculture and community development, which represented about 15 per cent of the total outlay. Of this amount, the various branches of agriculture accounted for Rs. 239 crores, national extension and community projects Rs. 90 crores, and local development works for Rs. 15 crores. By the end of the plan period, the total outlay on agriculture is estimated to be about Rs. 217 crores and on national extension and community projects Rs. 57 crores. For the outlay on local development works precise figures are not available, but preliminary approvals to the extent of Rs. 15 crores had issued from the Centre. Thus, in the sector as a whole a little over 84 per cent of the scheduled expenditure took place, the corresponding figure for national extension and community

projects being 63·3 per cent. The proportion of outlay to the plan provision after the additions which were made was 92·6 per cent for agriculture proper, 73 per cent for animal husbandry, 112·8 per cent for Forests and Soil Conservation, 78·6 per cent for cooperation and 71·5 per cent for fisheries. Thus, within the agricultural sector the performance during the plan period was by no means even.

AGRICULTURAL PROGRAMMES

3. The targets for agricultural production for the first five year plan were worked out on the basis of the results anticipated from the completion of a number of development programmes. These included major irrigation programmes, minor irrigation schemes, supply of manure and fertilisers, production and distribution of improved seed, land reclamation and improvement, plant protection and other measures for intensive agriculture. For each programme yardsticks of increase in production potential resulting from its fulfilment over given areas were adopted. The agricultural production targets related thus to increase in production potential independent of the effects of seasonal variations. Although statistical data needed are difficult to obtain and those available are far from satisfactory the targets so designed have to be distinguished from the levels of production reached during different years of the plan period. The latter reflect the influence of various development programmes as well as the effects of weather and other seasonal factors. The progress of major irrigation programmes is reviewed at length in Chapter VIII. Here it is sufficient to state that, during the first five year plan from major and medium irrigation works, irrigation was available for about 6·3 million acres of land as against the target of 8·5 million acres and that the area actually irrigated was a little over 4 million acres. The bulk of the Central assistance for agriculture was, however, devoted to minor irrigation programmes. The minor irrigation programmes included works of several kinds in each State. In some States the programme afforded greater scope for local cooperation and participation, in others there was greater reliance on Government organisation and initiative. In each State as the programme was implemented, in the light of the actual experience, changes were made and resources were shifted *inter se* between different types of works.

MINOR IRRIGATION WORKS

4. Minor irrigation includes a variety of works, such as, construction of percolation wells, repairs to old wells, construction of tubewells, installation of pumping sets, construction of tanks, excavation of derelict tanks and in hilly areas repair and diversion of

natural hill streams known as *kuhls*. Statistics about wells sunk or repaired and areas irrigated are difficult to compile, partly because as new wells are constructed a number of old wells go out of use, and partly because irrigation from wells is itself dependent on such factors as rainfall.

5. In several States substantial programmes for construction and repair of wells have been undertaken, as will be seen from the following table which brings together some of the available data:—

States	Number of wells constructed or repaired	
	1951-56	1955-56
Bihar	16,459	7,104
Madhya Bharat	26,796	6,479
Saurashtra]	32,967	4,180
Rajasthan	11,806	2,910
Pepsu]	10,040	1,729
U.P.	59,158	7,438
Bombay	13,939	1,276
Punjab	9,366	2,814
Delhi	1,802	364
Vindhya Pradesh	418	233

In Madras, Andhra and Mysore, useful results were obtained from 'filter point' tubewells near river beds or at places with sandy strata with high water level. These wells command areas of 5 to 10 acres and are not difficult to operate. For instance, in Madras 2657 and in Andhra 1268 such wells were sunk.

6. One of the important minor irrigation schemes undertaken during the first plan was the construction of tubewells. In all 700 tubewells were to be constructed under the Grow More Food Programme and 2650 under the Indo-U.S. Technical Cooperation Programme. Greater progress was made with the latter than with the former. Thus, 2504 tubewells were completed and 1897 energised under the Indo-U.S. Programme, the corresponding figures for tubewells under the Grow More Food Programme being 265 and 118

respectively. The statement below gives the distribution of tubewells under all the programmes as furnished by States:—

State	T.C.M. Tubewells		G.M.F. Programme 1954	Others	Total	Tubewells	
	1952 Pro-gramme	1953 Pro-gramme				Con-structed	Ener-gised
U.P.	995	280	420	700	2395	2118	1876
Punjab	355	175	150	256	936	793	486
Pepsu	309*	160	130	..	599	427	289
Bihar	350	35	..	300	685	684	605
Bombay . . . . .	..	..	..	400	400	268	268
TOTAL	2009	650	700	1656	5015	4290	3524

*This includes 9 tubewells under 3 per cent variation.

(NOTE: These figures relate to the period ending June 19, 1956.)

7. Although there was some irrigation from the new tubewells during the plan period, owing to the time taken and in particular on account of the lag between the drilling of tubewells and the provision of energy, the irrigation benefits obtained fell short of the initial expectations. Similarly, the project for 350 exploratory tubewells which was begun in January 1955, made less satisfactory progress than had been hoped for. Upto March, 1956, 30 bores were drilled and 16 of these were successful. These latter were converted into production tubewells for irrigation. There were delays in the receipt of essential equipment. A small number of tubewells were also sunk by private farmers with assistance from State Governments. Thus, in the Punjab 180 and in Bihar 64 such tubewells were constructed.

8. In States such as Bihar, Orissa, Madhya Pradesh, Bombay, West Bengal and Madhya Bharat a considerable number of small irrigation works, such as digging of new tanks, desilting of old tanks, damming of small streams and rivulets etc. were undertaken. Thus, during the five years of the first plan, Bihar completed 4953 schemes of this character, Bombay 2306 and West Bengal 2963. Apart from natural facilities which exist in different States for these small irrigation schemes, the most important factor determining the size of the programme undertaken was the extent to which local co-operation and participation could be organised. Here, despite the opportunities which exist in several States sufficient emphasis was

not given to popular cooperation and there was frequently a tendency to turn minor irrigation into a programme of small irrigation works undertaken mainly on Government initiative and through Government agencies.

9. In Madras, Andhra, Mysore and Bombay encouraging results were achieved with water lifting appliances. These consist of pumping sets worked by diesel engines or by electric power and are employed for lifting water from streams, lakes, tanks and wells. These appliances were either worked departmentally or were supplied to farmers through taccavi loans or on hire-purchase terms. State-operated schemes helped to increase the use of such appliances and in Madras and Andhra farmers took to them in increasing degree and in Bombay they stimulated the formation of cooperative lift irrigation societies. The area brought under irrigation through these lift irrigation societies is relatively small and a review of the problems which have arisen in their working would be useful. In Madhya Pradesh, Bihar and Hyderabad also there was a marked increase in the demand for electric pumps and oil engines.

10. It will be seen from statement below that during the first plan about 10 million acres of land benefited from minor irrigation works. It may be observed here that statistics of minor irrigation works undertaken and of areas benefited are far from satisfactory. At present there is no record of areas benefiting from small works which go out of irrigation year after year, nor is there a close enough correspondence between returns of areas irrigated and of additional irrigation facilities established in successive years. Clearly the entire subject needs closer investigation.

Area under Minor Irrigation—G.M.F. Schemes

(' 000 acres)

States	Area
1. Andhra	174
2. Assam	867
3. Bihar	1774
4. Bombay	344
5. Madhya Pradesh	95
6. Madras	508
7. Orissa	185

States	Area
8. Punjab	827
9. U.P.	1493
10. West Bengal	1214
11. Hyderabad	145
12. Madhya Bharat	64
13. Mysore	281
14. Pepsu	139
15. Rajasthan	109
16. Saurashtra	183
17. Travancore-Cochin	147
18. Other Part 'C' States	96
19. State Tubewells	831
TOTAL	9476

FERTILIZERS AND MANURES

11. In view of the deficiency of nitrogen in Indian soils, in recent years the use of nitrogen as fertilizer has expanded fairly rapidly. In terms of ammonium sulphate the total consumption of this nitrogenous fertiliser increased from 275,000 tons in 1950-51 and 282,000 tons in 1951-52 to 600,000 tons in 1955-56. On the other hand, the consumption of phosphatic fertilizers, which it has been sought to encourage with a subsidy upto 25 per cent of the cost, has increased only from 43,000 tons in 1951-52 to 78,000 tons in 1955-56.

12. Three main problems in the working of the fertilizer programme have been encountered and it cannot be said that in any State an altogether satisfactory approach towards them has been so far evolved. It is recognised that chemical fertilisers should be used as far as possible along with organic manures, including green manure, but work on this latter programme has been on a totally insufficient scale. Secondly, although a variety of distribution arrangements has been tried out, as for instance, through depots of the agricultural department, through private distributors as well as in a few cases through cooperative societies, farmers do not find it by any means easy to obtain the quantities of fertilizers needed by them and instances of supplies running short or arriving late have been by no means uncommon. In the third place except to a very limited extent, the distribution of fertilizers has not been supported by supply of agricultural credit.

13. The Grow More Food Enquiry Committee had indicated that there was considerable scope for accelerating rural compost and farm-yard manure schemes and there was need for greater efforts to popularise green manures. One of the weaknesses in the fertiliser and manure programme during the first five year plan, however, was that on the whole agriculture departments and extension agencies did not devote sufficient attention to the development of local manurial resources. On the other hand, in the development of urban compost, appreciable progress was made. As compared to 1048 at the beginning of the plan, in 1955-56, 2251 urban local bodies and centres were engaged in the composting of town wastes. In 1955-56 over 2 million tons of urban compost produced and about 1.8 million tons distributed as part of the intensive cultivation programme (compared to 1.6 million tons and 1.2 million tons in 1951-52). Allied to this is the programme of sewage and sullage utilisation which was introduced by 1955-56 in 24 towns as compared to 3 towns in 1951-52.

IMPROVED SEEDS

14. In working out details of the agricultural production programmes for the first five year plan insufficient stress was laid on the contribution which the introduction of improved seeds could make. This deficiency should have been made good in the course of implementation of the plan, especially in view of the following recommendations made by the Grow More Food Enquiry Committee in June, 1952:—

(a) Farms for producing nucleus seeds should be established; in many cases they do not exist in adequate numbers.

(b) Arrangements should be made for multiplying seeds locally. The system of registered growers is sound; but care should be taken in selecting them and ensuring that they are assisted by the department with technical advice.

(c) Adequate premia should be paid on pure seeds.

(d) Provision should be made for the multiplication of pure seed in 'protected areas'.

The Grow More Food Enquiry Committee drew attention to the unsatisfactory progress made in producing and distributing improved varieties of seeds of food crops and recommended the setting up of an expert standing committee under the Indian Council of Agricultural Research which would review every year the steps taken in each State for evolving pure strains for the main food crops, multiplying seeds and distributing them and would make recommendations from time to time for ensuring that as large areas

in the States as possible were brought under improved seeds. States were also asked to set up local committees to work in co-operation with this Central Committee. A similar recommendation had been made earlier in the First Five Year Plan. A committee on these basis was set up in June 1952. The following statement embodies information supplied to the Grow More Food Enquiry Committee regarding areas in different States under improved varieties of food crops:—

Area under improved varieties of food crops

State	Area under improved varieties	Total area under the crop	Percentage of Col. 2 to Col. 3
1	2	3	4
(Lakh acres)			
<i>Paddy</i>			
Bihar	27.62*	143.45	19
Madhya Pradesh	10.17*	89.33	11
Madras	3.69	101.26	4
Uttar Pradesh	8.25*	93.34	9
Bombay	6.94	30.01	23
Punjab	5.56	5.56	100
Assam	1.98	40.48	5
West Bengal	0.52*	98.03	0.5
Hyderabad	0.47*	11.31	4
Madhya Bharat	0.08†	2.94	3
Mysore	1.13*	7.81	14
Travancore-Cochin	1.00†	8.00	13
<i>Wheat</i>			
Punjab	30.29	30.29	100
Uttar Pradesh	15.50	77.27	20
Madhya Pradesh	2.35*	25.03	9
Bihar	2.28*	13.68	17
Madhya Bharat	0.41†	19.47	2
Pepsu	2.82	9.40	30
<i>Jowar</i>			
Bombay	30.62*	101.15	30
Punjab	6.22	6.22	100
Madhya Bharat	0.61†	27.60	2

*Includes figures for natural spread.

†Relates to 1951-52.

State	Area under improved varieties	Total area under the crop	Percentage of Col. 2 to Col. 3
1	2	3	4
<i>Gram</i>			
Punjab	31.65	31.65	100
Uttar Pradesh	6.67*	60.28	11
Bihar	1.50*	12.68	12
Madhya Bharat	0.12†	13.48	1
<i>Bajra</i>			
Bombay	2.21*	49.75	4
Punjab	20.45	20.45	100

*Includes figures for natural spread.

†Relates to 1951-52.

15. In the review of the provisional agricultural production programmes for the second five year plan which took place during September and October 1956, information furnished on this subject by States was as follows:—

Area under improved varieties of food crops in 1955-56

(Lakh acres)

State	Area under improved varieties	Total area under the crop	Percentage of columns 2 to 3
1	2	3	4
<i>Paddy</i>			
Andhra	31.2	46.0	70
Assam	3.4	42.0	8
Madhya Pradesh	14.7	92.0	16
Orissa	9.6	96.0	10
Uttar Pradesh	10.0	85.0	11.7
West Bengal	11.0	110.0	10.0
Jammu & Kashmir	0.46	4.6	10.0
<i>Wheat</i>			
Madhya Pradesh	4.80	30.0	16
Uttar Pradesh	30.00	94.0	32.9
Punjab	24.50	35.0	70.0
<i>Milllets</i>			
Madhya Pradesh	37.50	50.0	75.0
<i>Others—Based on total cropped area</i>			
Bihar	37.60	277.0	14.0
Bombay	41.00	410.0	10.0
Madras	79.70	195.0	46.0
Mysore	1.70	865.0	2.0

(Based on the information supplied at the time of review of targets).

The two sets of data given above are not comparable and in each there are large elements of error and possible guess work. It would, however, be correct to say that the progress made during the period of the first plan in evolving improved strains for different crops, in producing quantities of nucleus seed and in multiplying them for local distribution was on the whole poor and work which, should have been accomplished in the first phase of planning was left over for the period of the second five year plan. It should also be observed that accurate data regarding the seed multiplication and distribution programmes are not available and this makes it difficult to offer a precise statistical assessment of the work actually done in this field.

LAND RECLAMATION AND DEVELOPMENT

16. During the first five year plan land reclamation and development programmes were carried out by the Central Tractor Organisation, by State Tractor Organisations and with Government assistance by private farmers. The C.T.O. reclaimed 11.86 lakh acres of land compared to the targets of 11.1 lakh acres. The area reclaimed from *Kans*, a pernicious weed which renders the land unfit for cultivation, was distributed over four States, namely U.P. (208,267 acres), Madhya Pradesh (369,594 acres), Madhya Bharat (289,974 acres), and Bhopal (268,187 acres). Jungle clearance was undertaken in U.P. (41,221 acres), Bhopal (7,076 acres) and Assam (1,820 acres). Reclamation work began on a small scale in 1947-48 and proceeded at the rate of 200,000 acres or more per year during the period 1950-51 and 1954-55 and tapered off towards the end of the plan. A number of States maintained their own tractor organisations which undertook land reclamation programmes. The Madras tractor organisation reclaimed 188,542 acres of land; in U.P., 126,072 acres and in Madhya Bharat 205,000 acres of land were reclaimed; smaller areas were taken up in Assam, Bihar, Orissa and Vindhya Pradesh. On the whole, land reclamation operations by Government tractor organisations were not found to be economic and in most cases at the end of the plan there were large areas awaiting recovery.

17. Among important reclamation schemes undertaken by States during the first plan reference may be made to the reclamation of *Khar* and *Khajan* lands in some of the coastal districts of Bombay which suffer from encroachments from sea waters on agricultural lands. The Government of Bombay set up a *Khar* Lands Development Board and drew up a programme for reclaiming 125,000 acres in the districts of Thana, Kolaba, Ratnagiri, Broach and Surat. In all 68,000 acres of land were reclaimed during the plan period. In U.P. in the *terai* area at the foothills of the Himalayas in the

Nainital district and in the rivers in tracts known as the Ganga-Khadir about 55,200 acres of land were reclaimed. The U.P. Government established 16,500 acres State farm in the *terai* area for the production of pedigree seed and improved breeds of cattle and poultry.

OTHER AGRICULTURAL PROGRAMMES

18. Intensive methods of paddy cultivation frequently described by the name of the Japanese method, formed an important part of extension work by Agriculture Departments during the first five year plan. The area under this improved practice increased from 400,000 acres in 1953-54 to about 2.1 million acres in 1955-56.

19. On the whole, during the first plan, barring some notable exceptions, programmes relating to the supply of improved agricultural implements and the adoption of improved agricultural practices and new crop patterns did not receive adequate attention.

20. The Ministry of Agriculture had formulated a scheme for establishing 10 plant protection centres to assist States in fighting pest and plant diseases. During the plan only 4 centres were established. An air-cum-land quarantine station was established at Amritsar and a fumigation station at Cochin, but the plant quarantine station proposed for the port of Calcutta was not established.

DEVELOPMENT OF HORTICULTURE

21. In the development of Horticulture, specially fruit growing, much useful work was done during the first plan and there is evidence of its success in the greater production of fruit and vegetables in several parts of the country. In a number of States, such as, U.P., Bombay, Madhya Pradesh, Madras and Punjab, research on high-yielding and disease-resistant varieties of improved fruits has been in progress. Similarly, developmental work has been supported by the establishment of nurseries and the distribution of reliable fruit graft and seedlings. In U.P. one million fruit trees are reported to have been planted during the plan period and the area under gardens increased by 4,111 acres. In Assam 256,000 grafts of various fruits, 440,000 pine apple plants and 253,000 banana plants were distributed. Madras distributed 630,000 plants of various fruits and 290,000 lbs. of vegetable seed. In the Punjab 27 cooperative garden colonies with a total area of 21,960 acres were established on selected evacuee lands allotted to displaced persons, and 3,396 acres of land have been put under fruit trees. In Jammu and Kashmir, which had 10 fruit nurseries, 10 more new fruit plant nurseries were established and during the last year of the plan

124,566 plants were distributed. Work relating to the production of special types of vegetables suited to temperate climates was further developed and a Vegetable Seeds Act was passed in 1954 for prescribing and controlling quality standards for export of seeds. In Himachal Pradesh 3 fruit research stations, 5 progeny orchards and 22 fruit nurseries were established.

TRENDS IN AGRICULTURAL PRODUCTION

22. Advance estimates of agricultural production over a series of years necessarily contain a large element of conjecture. As Agriculture is subject to many hazards and uncertainties it is not possible to attempt a clear correlation between programmes of development which are undertaken during a given period and the actual results in production. Nor, even if the available data were more satisfactory, it is easy to follow through the various programmes over the entire country and arrive at a correct estimate of the extent to which they have been implemented and how they have reacted upon another. The experience of the first five year plan in the field of agriculture, both where there has been success and where there has been failure, stresses the need for supplementing general reports on the implementation of individual programmes by small-scale sample and type studies.

23. In formulating agricultural production programmes for the first five year plan the production levels of 1950-51 were taken as the base for all crops except foodgrains for which 1949-50 was adopted as the base. It was anticipated that if the various programmes provided for in the plan were carried out, the production of foodgrains could increase by 7.6 million tons, of oilseeds by 400,000 tons, of sugarcane by 700,000 tons, of cotton by 1.26 million bales and of jute by 2.1 million bales. In making these estimates it was not possible to allow in any detailed way for the possible effects of changes in the relative prices of different crops. The assumptions made in respect of areas under different crops over the course of the plan were also of a very general character. It is essential that these limitations of the targets of agricultural production proposed for the first five year plan should be stated so that the results actually secured over the five years of the plan could be viewed in correct perspective.

24. As suggested earlier, a correct test of the success of agricultural production programmes would be the measure in which the works and the improved agricultural practices envisaged under the first five year plan were carried out. It is recognised that the data available are not precise enough to permit such a comparison.

For the first five year plan the total addition to production potential was worked out as follows:

	(Thousand Tons)
Major irrigation	2008
Minor Irrigation	2384
Land reclamation and development	1513
Fertilisers and manure	1148
Improved seeds	557
TOTAL	7610

From such estimates of the actual performance under each head as can be made, it appears that the production potential added on account of the programmes mentioned above fell short of 6 million tons as against the figure of 7.6 million tons set out in the Plan. The shortfall was distributed under such heads as major irrigation, fertilisers and manures, improved seed and land reclamation and development.

25. The following table shows the production of different crops between 1949-50 and 1955-56.

Crops	Unit	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56
Rice	Million tons	23.2	20.3	21.0	22.5	27.8	24.5	26.8*
Wheat	"	6.3	6.4	6.1	7.4	7.9	8.8	8.3
Millets (Jowar & Bajra)	"	8.5	8.0	8.3	10.4	12.4	12.5	10.3
Other cereals	"	8.0	7.0	7.5	8.9	10.2	9.9	9.2
Total cereals	"	46.0	41.7	42.9	49.2	58.3	55.7	54.6*
Gram & Pulses	"	8.0	8.3	8.3	9.1	10.4	10.9	10.2
Total Food-grains	"	54.0	50.0	51.2	58.3	68.7	66.6	64.8*
Major Oilseeds	"	5.1	5.1	4.9	4.7	5.3	6.2	5.7*
Sugarcane (gur)	"	4.9	5.6	6.1	5.0	4.4	5.8	5.9
Cotton	Million bales	2.6	2.9	3.1	3.2	3.9	4.2	4.0
Jute	"	3.1	3.3	4.7	4.6	3.1	2.9	4.2

*Partially revised estimates

It will be seen that there were considerable variations from year to year. Nevertheless, taken together, the picture is one of growth in agricultural production especially in the case of foodgrains and cotton.

26. The variations in the production of the principal crops over the plan period may be seen from the following statement.

Crop	Unit	Production base Year 1950-51	Increase over base production					First Plan target	
			1951-52	1952-53	1953-54	1954-55	1955-56	Addi- tional	Total
Foodgrains .	Million tons	54.0*	(—)2.8	4.3	14.7	12.6	10.8†	7.6	61.6
Oilseeds .	Lakh tons	50.8	(—)1.3	(—)4.2	2.1	11.6	5.7†	4.0	54.8
Sugarcane .	"	56.2	4.5	(—)5.0	(—)12.0	1.4	2.4	7.0	63.2
Cotton .	Lakh bales	29.1	2.2	(—)2.8	10.3	13.2	10.9	12.6	41.7
Jute .	"	32.8	14.0	13.1	(—)1.9	(—)3.5	9.2†	20.9	53.7

*Base 1949-50.

†Partially revised estimate.

It will be observed that if the years 1953-54 to 1955-56 are considered together, the targets for foodgrains, cotton and oilseeds were realised and in the case of sugarcane and jute, there were marked fluctuations in the level of production. The index of agricultural production rose, as will be seen from the following table, to 113.7 by 1955-56 and for foodgrains to 111.3.

(Base: 1949-50=100)

Item	Weight	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56
Foodgrains .	66.9	90.5	91.1	101.1	119.1	114.4	111.3
Oilseeds .	9.9	98.5	97.4	91.9	103.7	121.7	107.7
Sugarcane .	8.7	113.7	122.8	101.6	89.5	116.7	118.7
Cotton .	2.8	110.7	119.2	121.0	151.8	163.1	154.3
Jute .	1.4	105.3	151.4	148.6	100.0	94.7	133.8
All Commodities .	100.0	95.6	97.5	102.0	114.3	116.4	113.7

NOTE—The indices for 1954-55 are based on the partially revised estimate and those for 1955-56 are based on the final estimate and are, therefore, subject to revision.

Perhaps the most spectacular and lasting increase achieved was in the production of cotton.

27. It was natural to expect that there should be large variations in the results achieved from State to State. In the statement at the end of this chapter State targets for the principal crops which were worked out when the plan was formulated, are compared with production levels of 1955-56. The statement shows how the short-falls in the production of foodgrains in States like Bihar and U.P. were balanced by large increases in Madhya Pradesh, Madras, Hyderabad and Rajasthan. While the general trend of food production would appear to be upward, it must be admitted that favourable

seasons have played a notable part and there are substantial elements of instability despite the evidence of growth of agricultural production during the first five year plan. The experience of the first five year plan suggests the need for each State to undertake a critical assessment of the various factors which have operated in relation to its agricultural production trends during the past few years. From the overall production trends of the country as a whole only cautious conclusions may be drawn.

TEA, COFFEE AND RUBBER

28. Although mention was made of tea, coffee and rubber plantations in the First Five Year Plan, no separate production targets were proposed for them. Nevertheless, there has been a significant improvement in the output of these crops. Thus, the production of tea improved from 607 million lbs. in 1950-51 to nearly 665 million lbs. at the end of the plan period. The output of coffee was better still, largely due to a bumper crop in 1955-56 estimated at nearly 75 million lbs. The production of rubber increased from 32 million lbs. in 1951 to 49.5 million lbs. in 1955.

29. Black pepper received a set back during the plan period on account of slackness in demand from overseas customers. Compared to 1950-51, production rose by 6,000 tons and stood at 27,000 tons by the end of the plan period.

AGRICULTURAL PRICES

30. Reference has been made above to the difficulty in estimating in advance the impact of changes in price levels on the production of different crops. As a brief statement of the trends of prices of different crops, the following table sets out the annual index numbers of wholesale prices between 1950 and 1956 for the principal food crops and commercial crops.

(Base: Year ended August 1939=100)

	1949	1950	1951	1952	1953	1954	1955	1956
Rice . . .	495	514	544	527	514	417	442	549
Wheat . . .	635	531	549	533	566	492	433	528
Jowar . . .	274	340	297	216	212	185	119	249
Bajra . . .	265	245	245	245	283	233	212	281
Gram . . .	358	364	384	403	417	277	205	301
Cereals . . .	465	471	483	450	451	404	355	473
Food articles .	389.2	410.4	409.8	359.8	380.8	358.3	304.5	372.7
Cotton, raw .	416	450	501	424	440	464	402	479
Jute, raw . .	491	486	815	497	378	398	442	448
Groundnut . .	641	732	765	558	702	515	383	577
Linseed (Bold)	443	564	611	422	415	362	351	465
Gur . . .	260	411	305	174	265	251	152	183

AGRICULTURAL EDUCATION

31. The decision under the First Five Year Plan to organise community projects and to spread the national extension service to the entire country served as a new factor in the development of training facilities. The most important of the new types of personnel required by these programmes were village level workers who had to receive both basic agricultural training and training in extension cooperation and other activities. During the first five year plan, 44 extension training centres were established and these together trained 14,426 village level workers. In all 54 basic agricultural schools and wings were set up and, of these, 14 came into existence in the last year of the plan. In 1955-56, 7 group level workers' training centres were established and these turned out 1843 supervisory personnel. Also, in the same year 19 home science centres were set up and programmes for the training of gram sevikas were expanded.

32. The training facilities available for different kinds of personnel required for agricultural and allied programmes were reviewed from the point of view of requirements during the second five year plan. As a result of this review steps were taken to expand training facilities at the existing agricultural colleges in Assam, Hyderabad, Madras, and Madhya Bharat, to develop further and rehabilitate the Punjab Agricultural College at Ludhiana and to establish new agricultural colleges in Rajasthan, Bihar, and Travancore-Cochin. These measures led to the addition of training facilities for 390 agricultural graduates. The annual admissions of agricultural graduates increased from 1292 in 1953-54 to 1894 in 1955-56.

33. A joint team of Indian and American specialists was appointed by the Central Government in 1954 to make a comparative study of the organisation, functions and working of Indian and American institutions engaged in agricultural education and research and to recommend steps for removing critical deficiencies in the present methods and facilities in the field of agricultural research and education. The report of the joint team was received in October 1955.

AGRICULTURAL RESEARCH

34. For many years the Indian Council of Agricultural Research has guided and coordinated agricultural research programmes between the Centre and the States. Research schemes approved by the Council are an integral part of the research programmes undertaken by institutions maintained by State Governments.

While research institutions maintained by the Central Government concentrate on fundamental research on agricultural problems, those in the States are expected to devote special attention to the solution of problems of local or regional character. Research programmes are also organised under the aegis of the Central Commodity Committees and of Boards dealing with plantation crops. During the first five year plan some progress has been made in the application of the results of research in that field and in bringing about closer association between the extension worker and the research worker. At the end of the first plan the requirements of community projects and national extension service blocks, both for the practical application of results already obtained and for new research, were not being adequately met by existing arrangements.

35. During recent years a number of improved varieties of rice suitable for different soil-cum-climatic regions and giving an increase in yield of 10 to 15 per cent have been evolved. Also, for uplands, hilly tracts and areas where rainfall is precarious, for which early maturing varieties of rice are essential, experiments with imported varieties have been in progress. The advantages of transplanting over broadcast sowing are well established and the main problem is to ensure the adoption of transplanting practices on a large scale. Experiments carried out at the Central Rice Research Institute and at other centres have given useful results regarding the doses of ammonium sulphate which would be economic to the cultivator and beneficial to the soil. It is also well established that in paddy soils the use of green manures along with inorganic nitrogeneous fertilisers is cheap and advantageous, but extension work has lagged behind.

36. For most parts of the country improved varieties of wheat, especially for irrigated areas, have been evolved. An outstanding problem, however, has been that of rust disease. A considerable amount of work in recent years has been concentrated on this problem and new rust resistant varieties have been evolved. A new direction of activity during the first five year plan was the testing of various varieties of hybrid corn imported from the United States, Australia and Canada, with a view to evolving types suitable for Indian conditions. Favourable results have been secured. The production of hybrid seed in *bajra* has been in progress at Coimbatore and two hybrid combinations have been found to give better results than local varieties in the Madras State. Improved varieties of millets are being produced in Punjab, Uttar Pradesh, Bihar, and a few other areas, but over several parts of the country research work on millets has lagged behind seriously.

37. Experimental work in sugarcane was also undertaken during the first plan on such problems as trench planting, planting earlier than has been customary, use of farmyard manure and compost for soil improvement, quantities of water to be used for irrigation, etc. Some attention had also been given to research on problems, of canning, bottling, making of juices, squashes, preserves, etc.

Targets of Agricultural Production and Output in 1955-56

States	Foodgrains (In '000 tons)		Oilseeds (In '000 tons)		Sugarcane—Gur (In '000 tons)		Cotton ('000 bales of 392 lbs. each)		Jute ('000 bales of 400 lbs. each)	
	Target	Production in 1955-56	Target	Production in 1955-56	Target	Production in 1955-56	Target	Production in 1955-56	Target	Production in 1955-56
I	2	3	4	5	6	7	8	9	10	11
1. Andhra
2. Assam
3. Bihar
4. Bombay
5. Madhya Pradesh
6. Madras
7. Orissa
8. Punjab
9. Uttar Pradesh
10. West Bengal
11. Hyderabad

*Estimated on the basis of total target for the composite Madras State.

(b) Below 500 bales.

Targets of Agricultural Production and Output in 1955-56—contd.

States	Foodgrains (in '000 tons)		Oilseeds (in '000 tons)		Sugarcane—Gur (in '000 tons)		Cotton ('000 bales of 392 lbs. each)		Jute ('000 bales of 400 lbs. each)	
	Target	Production in 1955-56	Target	Production in 1955-56	Target	Production in 1955-56	Target	Production in 1955-56	Target	Production in 1955-56
I	2	3	4	5	6	7	8	9	10	11
12. Jammu & Kashmir	337	400	..	15	..	1	..	..	..	..
13. Madhya Bharat	1,112	1,530	177	189	36	47	311	356	..	..
14. Mysore	1,062	1,830	79	154	76	148	41	81	..	..
15. Pepsu	919	1,100	22	37	80	97	255	135	..	..
16. Rajasthan	1,275	3,700	130	233	16	58	164	146	..	..
17. Saurashtra	410	300	248	216	48	43	222	249	..	..
18. Travancore-Cochin	538	570	..	16	..	31	..	9	..	..
19. Ajmer	40	80	..	3	..	(n)	..	18	..	..
20. Bhopal	267	280	14	7	12.6	6	10	7	..	..
21. Coorg	39	70	..	(n)	..	(n)	..	..	..	..
22. Delhi	36	30	..	(n)	2.2	5	..	(b)	..	..
23. Himachal Pradesh	256	240	..	1	..	2	..	(b)	..	..
24. Kutch	39	40	2	5	1	1	5	16	..	..
25. Manipur	98	117	..	..	..	..	..	..	..	..

26. Tripura	.	198	130	3	6	6	6	..	7	72	50
27. Vindhya Pradesh	.	629	1,020	52	6.2	6	6	..	1	..	..
28. (i) Total for States for which separate figures are not given	.	1	3	16	..	..	..	27	..	..	..
(ii) Net addition for supplementary schemes	.	1,100									
TOTAL FOR INDIA	.	61,658	64,840**	5,503	5,651**	6,316	5,859	4,229	3,938	5,391	4,197**

**Relates to partially revised estimates.

(a) Below 500 tons.

(b) Below 500 bales.

CHAPTER IV

COMMUNITY PROJECTS AND THE NATIONAL EXTENSION SERVICE

COMMUNITY projects and the national extension service, which are in some ways the most significant development programme initiated during the first five year plan embody India's methods of approach to the problems of improving rural life under conditions of democratic planning. Before the first five year plan rural development work had been undertaken at many centres in the country by Governments and voluntary agencies. Their efforts, often on a small scale, had given indications of the approach and the methods most likely to succeed when development was taken up on a national scale. The lessons derived from these were summarised in the First Five Year Plan on the following lines.

- (1) When different departments of the Government approach the villager, each from the aspects of its own work, the effect on the villager is apt to be confusing and no permanent impression is created. The peasant's life is not cut into segments in the way the Government's activities are apt to be; the approach to the villager has, therefore, to be a co-ordinated one and has to comprehend his whole life. Such an approach has to be made, not through a multiplicity of departmental officials, but through an agent common at least to the principal departments engaged in rural work.
- (2) There has to be a dominant purpose round which the enthusiasm of the people can be aroused and sustained, a purpose which can draw forth from the people and those who assist them on behalf of the Government the will to work as well as a sense of urgency. The aim should be to create in the rural population a burning desire for a higher standard of living—a will to live better.
- (3) Programmes which have been built on the basis of self help and of co-operation of the people have greater chance of abiding success than those which are imposed on them from outside.
- (4) While the official machinery has to guide and assist, the principal responsibility for improving their own condition must rest with the people themselves. Unless they feel that a programme is theirs and are prepared to

make sacrifices for carrying it out, no substantial results will be gained.

- (5) Advice and precept are of no avail unless they are backed by practical aids—supplies of seed and fertiliser, finance and technical guidance for solving the farmer's immediate problems.
- (6) The best results will be gained if programmes are pursued intensively, and every family has its own contribution to make through village organisations which they regard as their own.
- (7) The approach to the villager should be in terms of his own experience and problems, conceived on the pattern of simplicity, and avoiding elaborate techniques and equipment until he is ready for them.

The aim of the community projects and national extension service programme was to apply these principles progressively throughout the country.

2. The programme began in October 1952 when 55 areas comprising 27,388 villages and a population of 16·7 million were selected for intensive development. About the same time, on the recommendations of the Grow More Food Enquiry Committee and the Planning Commission, it was decided to establish a Centrally supported national extension organisation for intensive rural work which could reach every farmer and assist in the co-operative development of rural life as a whole. The aim was to organise the National Extension Service, so that it could cover the entire rural area within a period of about ten years, that is to say, by the end of the second plan. In the first plan about 120,000 villages or one-fourth of the rural population were to be brought within the scope of the extension network. A development block, that is, an area comprising about 100 villages was to have a minimum administrative set-up consisting of the block development officer, extension officers for agriculture, animal husbandry and co-operation, two social education organisers, an overseer with public health bias, 10 village level workers, each serving a group of about 10 villages, and some ancillary staff. The group at the block level was to work as a team and the activities of developments concerned with agriculture, animal husbandry, co-operation and other activities were to be carried out in cooperation with village organisations, namely, the panchayat and the cooperative.

3. Community projects begun in 1952 were regarded as being equivalent to 300 development blocks, and 900 national extension service blocks were to be taken up during the first five year plan—180 in 1953-54, 270 in 1954-55 and 450 in 1955-56. The schematic budget for the average community development block provided for

a total outlay of Rs. 15 lakhs over a period of three years; in the case of a national extension service block the schematic budget was based on the outlay in three years of Rs. 4.5 lakhs in addition to short-term loans amounting to Rs. 3 lakhs. It was contemplated that a substantial part of the allotments made to different development departments under the State plan would be spent in areas selected as extension blocks. It was agreed that a proportion of national extension service blocks should be converted into community development blocks of the more intensive type. This would make them eligible for further allotments. The selection of areas to be so converted was to be based mainly on performance and the extent of public participation achieved. In September 1955, in relation to the programme for the Second Five Year Plan, it was proposed that not less than 40 per cent of the national extension service blocks should be converted into community development blocks. On the completion of the community development stage a block reverts to the normal pattern of the National Extension Service.

4. By the end of the first five year plan, the community projects and national extension service programme had been taken up in about 140,000 villages situated in 988 development blocks and was serving a population of 77.5 million persons. As part of the programme approved for the first five year plan, 172 blocks comprising 17,200 villages and a population of 11.3 million were taken in hand in April 1956. The following statement shows the number of development blocks taken up at each stage during the first five year plan with the number of villages and the population served:

	Number of Blocks allotted	Number of Blocks where work has started	Number of villages covered by Blocks indicated in Col. 2	Number of persons covered by Blocks indicated in Col. 2 (in millions)
	1	2	3	4
1. Community Projects Blocks 1952-53	167*	167	27,388	16.7
2. Community Development Blocks 1953-54	53	53	8,682	4.4
3. Community Development Blocks 1955-56 (on conversion)	152	152	20,817	12.1
4. N.E.S. Blocks 1953-54	112†	112	15,336	8.4
5. N.E.S. Blocks 1954-55	245	245	34,704	17.4
6. N.E.S. Blocks 1955-56	259	259	33,220	18.5
(Plus)	172‡	..	17,200	11.3
TOTAL	1,160	988	157,347	88.8

*In terms of area and population covered, this number was considered to be equivalent of 247 blocks.

†88 Blocks of the 1953-54 series and 98 blocks of the 1954-55 series were converted into intensive Community Development Blocks.

‡Although allotted in January 1956, programme of work was scheduled to be taken up on April 1, 1956. □

A provision of Rs. 90 crores had been made for this programme in the Plan in addition to about Rs. 10 crores provided in the plans of States for rural development. The total expenditure incurred on community projects and the national extension service was Rs. 46.02 crores.

5. The Planning Commission set up a Programme Evaluation Organisation independent of the Community Projects Administration (now the Ministry of Community Development) for carrying out continuous evaluation of the programme of national extension and community projects. The Organisation produced three annual reports during the first plan besides a number of other studies based on first hand investigation. In view of the central place assigned to it in the scheme of planning, the programme was under constant review through seminars and discussions, consideration in Parliament and the State Legislatures and examination by independent critics and students. For the success of a nation-wide programme of this magnitude, it is essential that the people should come to regard the movement as their own and to feel that its aim is to assist them in their efforts, individually and collectively, to raise their standards of life and create a new pattern of society. This consciousness is steadily growing in the country. This very fact strengthens the hope that the community projects and national extension service programme will fill in the coming years the place in national development which it was designed to have.

6. It is now being increasingly realised by extension personnel and other workers that the main emphasis in community development should be on increased employment and increased production, especially agricultural production. Expansion of agricultural production and the growth of subsidiary occupations are the necessary foundations for the development of social welfare services. Secondly, the main object of bringing an area under national extension or community projects is to provide the initial stimulus, to establish a method of coordinated working between the various agencies, and to build up people's organisation, in particular the cooperative and the panchayat, so that these can undertake much of the responsibility for social and economic development in the village. The emphasis on the cooperative and the panchayat is of great importance, for in the initial stages in many project areas there was a tendency to set up *ad hoc* village bodies and to under-estimate the contribution which well-organised cooperatives and village panchayats enjoying local support could make towards the success of the programme. In the third place, to succeed in its purpose, the community development programme has to be so organised that every family in the village has a plan of improvement and participates effectively in the effort of the community as a whole. The programme has to

be informed by a deep and continuous concern with the welfare of the less privileged sections of the community and by a sense of mutual responsibility. Women and youth have to be drawn more fully into various activities. Fourthly, the national extension and community projects organisation is an integral part of the development machinery of State Governments. It has to be used not only for carrying out programmes included in the budgets of development blocks, but also for implementing the programmes of various development departments. Finally, as the people of each area realise the possibilities of development and are willing to make a larger contribution from their own resources and to adopt scientific improvements, the various agencies of Government, especially the technical departments, have to equip themselves for the service expected of them. It is through the fulfilment of conditions such as these that it will be possible to secure integrated planned development at the district, block and village level, which is among the major aims of community projects and the national extension service.

7. The Community development programme makes a comprehensive approach to the social and economic aspects of rural life and includes within its scope activities relating to agriculture, co-operation, animal husbandry, minor irrigation, village and small industries, health and social education. The following statement shows the total expenditure incurred in the various categories of projects taken up during the first plan and sets the figures of expenditure against the number of villages and the population served by each group in March, 1956.

	Expenditure during the Plan (Rs. lakhs)	Number of blocks	Number of villages	Population (millions)
<i>(a) Community projects/blocks</i>				
(i) 1952-53 series	2,345	167	27,388	16.7
(ii) 1953-54 series	418	53	8,682	4.4
(iii) 1955-56 series (on conversion)	466	152	20,817	12.1
TOTAL	3,229	372	56,887	33.2
<i>(b) National Extension Service blocks.</i>				
(i) 1953-54 series	386	112	15,336	8.4
(ii) 1954-55 series	442	245	34,704	17.4
(iii) 1955-56 series	115	259	33,220	18.5
TOTAL	943	616	83,260	44.3
GRAND TOTAL	4,602*	988	140,147	77.5

*Total includes a sum of Rs. 430 lakhs as cost (tentative) of imported equipment received to March, 1956.

It will be seen that about half the expenditure was incurred in areas which were taken up under the first 55 community projects. These represented a fifth of the total number of villages served by the programme at the end of the first plan. About 31 per cent of the expenditure was incurred on national extension service blocks, including those converted into community development blocks in 1955-56. These represented over 70 per cent of the total number of villages taken up under the programme.

8. The distribution of expenditure between different developmental programmes during the plan period in national extension and community project areas was as follows:

	Rs. in lakhs
Animal husbandry, agriculture and reclamation	426
Irrigation	734
Health and rural sanitation	452
Education and social education	460
Communications	664
Rural arts, crafts and industries	178
State and project headquarters	962
Housing (project staff and rural housing)	36
Cost of imported equipment	430
Miscellaneous	260

TOTAL	4,602

Extension personnel at the block and village level are common agents of the departments dealing with various development activities and, in turn, in each area, besides expenditure incurred from allotments made for community projects and the national extension service, funds are provided in varying degree from the budgetary allotments of different departments. In the working of the national extension and community projects enough attention has not been given to the scope which exists for supplementing budget provisions of the programme from other sources and integrating both in an effective manner. Another aspect of the same problem is that each development department should work out its programmes and targets for the State as a whole, distinguishing clearly programmes to be carried out in national extension and community project areas and in other

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areas. Until towards the end of the first plan there was perhaps a tendency on the part of individual development departments to consider that national extension and community project areas were in some way less their concern than other areas. Similarly, block development officers in charge of project areas did not always appreciate that the programmes which they undertook in different fields were part of development programmes in those fields for the entire State and that ultimately even their performance would be judged by the total impact in each sector as a whole. One result of this situation is that figures of achievement furnished for project areas are sometimes difficult to reconcile or interpret in relation to the overall progress in different fields made in a State or in the country as a whole. This difficulty is experienced in assessing performance in such programmes as agricultural production, supplies of fertiliser and seed, area brought under irrigation from minor works, establishment of new co-operative societies and enrolment of new members as well as in the field of social services. In planning as well as in implementation there is need for much closer integration between work in national extension and community project areas and in other areas, both at the district and block level and at the State level. Such co-ordination is expected to be achieved during the second five year plan because each year larger areas will come within the scope of the national extension and community project programme.

9. Although statistics of achievement under different heads in national extension and community project areas suffer from the limitations described above, it is of some interest to recall the range of activities attempted in these areas. For instance, during the plan under the agricultural programme in national extension and community project areas 176,666 tons of improved seed and 335,285 tons of chemical fertilisers were supplied, 157,000 acres of land were planted with fruit trees, 388,000 acres of land were brought under vegetable cultivation and 1.1 million acres of land not previously under cultivation were developed. The additional area brought under irrigation mainly from minor works was about 2 million acres. Under the animal husbandry programme 2,563 key village centres were established and 12,824 pedigree animals were supplied.

During the three years 1953-54 to 1955-56, the number of agricultural credit cooperatives increased from 101,628 to 159,939 and the number of members increased from 5.1 to 7.8 million. There was also appreciable increase in working capital, paid-up share capital, and investments and assets of agricultural credit societies. The greater part of these advances took place in areas served by the national extension and community development programme.

A great deal of public participation occurred in the construction of rural roads and in the improvement of village sanitation. It is estimated that in national extension and community project areas 6,029 miles of metalled roads and 38,000 miles of unmetalled village roads were constructed and 22,000 miles of existing roads improved. Under the programme of health and rural sanitation 42,000 drinking water wells were constructed and 65,000 renovated and 110,000 rural latrines were built. The programme carried out included also the establishment of 674 primary health centres, 578 maternity and child welfare centres and extensive construction of village drains.

The programme in the field of education and social education carried out during the first plan in national extension and community project areas included the establishment of 15,000 new schools, conversion of 6,968 primary schools from the ordinary to the basic type, and establishment of 41,000 centres for adult education. About a million adults became literate and large number of community centres, including recreation centres and village libraries were organised.

A beginning was also made in the development of village and small industries. Twenty-six pilot projects were started in community project areas in cooperation with the all-India Boards dealing with different groups of cottage and small-scale industries. To carry out this programme, action committees were established at the Centre in the Community Projects Administration and in the States. It is admitted that so far in each area *ad hoc* development schemes have been taken up. Programmes worked out carefully in relation to the resources, skills and employment needs of each area have still to be evolved.

During plan in national extension and community project areas 11,451 village panchayats and other statutory bodies were established. During the same period *ad hoc* bodies like 'vikash mandals', village councils, etc., numbering 24,829 were also set up. Some of these have been or will in due course be replaced by village panchayats.

10. The extent of public participation in the development programme of an area is always difficult to measure. The number of families directly participating in or benefiting from an activity afford a useful test but, in the nature of things, the statistics needed for such assessment are not easily obtained. An indicator which has been frequently used in the community development programme is

the value of people's contribution compared to the cumulative figure of Government expenditure in national extension and community project areas. The following statement shows the estimated contribution by the people per thousand persons in different groups of national extension and community project areas up to the end of the plan period along with public expenditure incurred in those areas:

	Popula- tion (Million)	Govern- ment ex- penditure (Rs. lakhs)	Total estimated value of people's contri- bution (Rs. lakhs)	Government expen- diture per 1000 persons (Rs.)	Estimated value of people's contribution per 1000 persons. (Rs.)
<hr/>					
(a) Community projects/blocks					
(i) 1952-53 series . .	16.7	2,345	945	14,042	5,612
(ii) 1953-54 series . .	4.4	418	191	9,500	4,344
(iii) 1955-56 series (on con- version from NES) .	12.1	466	351	3,851	3,357
(b) N.E.S. blocks					
(i) 1953-54 series . .	8.4	386	507	4,595	4,611
(ii) 1954-55 series . .	17.4	442	514	2,540	2,677
(iii) 1955-56 series . .	18.5	115	105	622	803
<hr/>					
TOTAL . .	77.5	4,602*	2,613	5,938	3,484

*Total includes a sum of Rs. 430 lakhs as cost (tentative) of imported equipment received upto March, 1956.

11. The programme of national extension and community projects called for elaborate arrangements for the training of personnel for training village level workers. Thirty-four extension training centres were organised in 1952 and at the end of the plan the number was raised to 43 with an annual output of about 5,000. Arrangements for basic training in agriculture were made in a number of institutions. These included 30 new basic agricultural schools, 13 agricultural wings attached to existing training centres and several reorganised institutions. During 1955-56, 3 extension training centres and 3 basic agricultural schools were established.

Seventeen extension training centres out of the 43 in existence at the end of the plan were selected for orientation training for group level workers as part of the training programmes for the Second Five Year Plan. By March 1956, 14,087 group level workers had been trained. The training of block level extension workers for the rural industry programme was arranged at the Small Industries Service Institute. Three centres were organised for the training of block development officers and at the end of the plan 885 block officers had been trained and 64 were undergoing training. By March 1956, 1,327 social education organisers had been trained and 384 were under training. For tribal areas, in 1955-56, special training was given to 28 social education organisers. Training arrangements for auxiliary midwives, midwives and lady health visitors, were made at 53 different centres. Out of the 27 Home Science Wings sanctioned for the training of women village level workers, 22 were established during the plan period. Arrangements were also made in 25 different institutions for a multi-purpose overseers training course lasting for 18 months. Seminars on community development held in different regions, in which workers at all levels participated, conferences of heads of training institutions and annual meetings of Development Commissioners have helped to identify practical problems facing extension workers throughout the country and have generally provided useful material for criticism and reform from within.

12. During the First Five Year Plan, the national extension and community projects programme was guided at the Centre by a Central Committee consisting of Members of the Planning Commission, the Minister of Food and Agriculture and the Minister of Agriculture. In the States, State Development Committees consisting of the Chief Minister and some members of the State Cabinet provided the necessary direction. At the State level, coordination with the various development departments was provided by the Development Commissioner, who also held in several States the office of Secretary of the Planning Department and in this capacity was concerned with the State plan as a whole. In districts and subdivisions, the Collector and Sub-Divisional Officer functioned as leaders of teams composed of specialist officers. Similarly, within development blocks, the block development officer served as the team leader with individual extension officers obtaining guidance from their respective departments. The administrative problems of the national extension and community development programme are a subject of consideration at the annual conferences of Development Commissioners and some aspects have also been studied in detail by the Programme Evaluation Organisation of the Planning Commission.

CHAPTER V

DEVELOPMENT OF COOPERATION

THE First Five Year Plan described co-operative forms of organisation as an indispensable instrument of planned economic action in a democracy. Except for a general emphasis on the co-operative approach and some specific provisions for agricultural credit, co-operative experiments and training of co-operative personnel, the Plan relied on action by the States and by the Reserve Bank of India for the development of the co-operative movement. The progress of community projects and the national extension service programme and the publication at the end of 1954 of the report on the Rural Credit Survey focussed fresh attention on the role of the movement, its weaknesses in the past, and the lines along which it should advance in the future.

2. During the first five year plan the number of co-operative societies rose from about 180,000 to about 240,000 and the number of members from 13·72 to 17·62 million. As against total deposits of Rs. 90 crores in June 1951, five years later the deposits of the co-operative movement amounted to Rs. 138 crores. During the same period the working capital of co-operative societies, rose from Rs. 276 crores to Rs. 469 crores. Thus, the increase in the number of societies, membership, deposits and working capital was respectively 33, 28·5, 53 and 70 per cent.

3. Primary co-operative societies fall broadly into two groups—agricultural and non-agricultural. At the end of the plan there were 198,678 agricultural societies, of which 159, 939 or over 80 per cent were credit societies, and there were 37,748 non-agricultural societies, of which over 73 per cent were non-credit societies. Non-credit societies include co-operatives for diverse purposes such as weavers' societies, industrial societies, housing societies, etc. Non-agricultural societies account for more than 50 per cent of the loans advanced by primary co-operatives. During the three years, 1953-54 to 1955-56, when programmes under the First Five Year Plan helped in increasing measure to create the climate of development within the country, there was steady growth in the size of the co-operative movement and in the scope and diversity of the activities in which it engaged. Thus, while the development of the movement is in some part linked with questions of policy, organisation and personnel, as rural and industrial programmes are carried out, conditions which are inherently favourable to the success of co-operation were also created.

AGRICULTURAL CREDIT

4. The need for expanding the supply of credit through co-operative agencies has become greater in recent years both because traditional sources of credit are contributing less and because of the larger agricultural production programmes which have to be undertaken. Adequate supply of credit is also vital to the success of the national extension service and community projects programme and for other rural programmes such as land reform and village industries. During the first five year plan 53,000 new agricultural credit societies including Grain Banks were registered and their total number increased from 1.15 lakhs to 1.60 lakhs. Agricultural societies enrolled 3.5 million new members. Their volume of business also increased, as may be seen from the statement below:—

Year	Amount of loans advanced (Rs. crores)	Percentage of overdues to loans outstanding	Deposits (Rs. crore)
1950-51	22.90	21.8	4.29
1951-52	24.58	25.3	4.23
1952-53	25.98	27.8	4.21
1953-54	29.99	28.9	4.46
1954-55	35.87	30.3	5.15
1955-56	50.18	25.0	6.60

The role of the co-operative movement in harnessing small savings and in developing thrift has not been sufficiently stressed in recent years. This is reflected in the small increase in deposits.

5. As owned funds and deposits held by agricultural credit societies are generally small, they draw large sums from Central co-operative banks by way of loans. There were 505 central banks in 1950-51 which granted loans to primary societies. Some of these banks functioned without adequate share capital, while some others lacked fully qualified or trained staff. A policy of consolidation of such small units was, therefore, pursued. The Reserve Bank of India helped the State Governments in evolving a programme which would eventually provide an efficient and strong co-operative bank for a district or a sub-division. As a result of the action taken the number of co-operative banks has been reduced to 478. The total deposits held by them from individuals amounted to Rs. 37

crores and from primary co-operative societies to Rs. 18.30 crores. Besides collecting deposits, Central co-operative banks also obtain funds from State co-operative banks. By the end of 1955-56 all the States including those formed by merger of the former princely States, had their own State co-operative banks.

6. The Reserve Bank of India provided short-term accommodation to State co-operative banks at a concessional rate of interest which was 2 per cent below the bank rate. The scale of operations of the Reserve Bank of India increased steadily so that, compared to Rs. 5.38 crores advanced in 1950-51, in 1955-56 the Bank advanced Rs. 25.61 crores. The advances made by the Reserve Bank from year to year, which have been an important element in the recent growth of the co-operative movement, are shown below:—

Year	Amount (Rs. crores)
1950-51	5.38
1951-52	12.11
1952-53	11.90
1953-54	14.72
1954-55	18.04
1955-56	25.61

By an amendment of the Reserve Bank of India Act, the Reserve Bank was permitted to provide medium term loans for agricultural improvement. The Bank advanced Rs. 27 lakhs in 1954-55 and Rs. 90 lakhs in 1955-56 as medium term loans.

7. Long-term finance for agriculture is provided mainly by primary land mortgage banks, of which there were 302 in 1955-56 compared to 291 five years earlier. The total loans advanced by these banks and by the Central Land Mortgage Banks which dealt with agriculturists directly increased during the plan period from Rs. 1.37 crores to Rs. 2.86 crores.

8. It was envisaged in the First Five Year Plan that by 1955-56 the credit available by the co-operative movement and Government agencies together for agricultural production should reach the level of Rs. 135 crores per annum—Rs. 100 crores as short-term loans, Rs. 25 crores as medium-term loans and Rs. 10 crores as long-term loans. The loan operations of co-operatives as well as of State Governments increased during the plan, the former to an annual level of Rs. 53 crores and the latter to Rs. 27 crores, but total results were considerably short of the targets indicated in the Plan. The

main weakness lay in the fact that the co-operative movement is not yet sufficiently broad-based and arrangements for credit have not been linked generally with programmes for increasing agricultural production and with schemes of co-operative marketing of agricultural produce. The system of advancing short-term loans with reference to the anticipated crops was also not developed to any extent.

9. As suggested earlier, the national extension service and community projects programme has created in rural areas the conditions in which co-operation could develop steadily as a people's movement. In areas covered by this programme considerable numbers of new societies were registered and new members enrolled. The influence of this programme as well as of other developments of the first five year plan is reflected in the growth of the co-operative movement as seen in the following statement:—

Agricultural Credit Societies

	End of 1952-53	Addition in		
		1953-54	1954-55	1955-56
Number of societies	111,628	15,326	16,366	16,619
Number of members	5,126,002	723,378	716,036	1,225,434
Working capital (Rs. in lakhs)	4,918	523	852	1,618
Paid up share capital (Rs. in lakhs)	990	153	183	354
Investments and Assets	889	187	180	432

10. It should be pointed out, however, that while there is evidence of growth in the number, resources and scale of operations of agricultural credit societies, some of the principal weaknesses of these societies continue as much as before. As these weaknesses are eliminated and stronger organisations built up, it should become possible to achieve a much greater rate of development. Thus, the average membership of agricultural credit societies is still small, having risen from 45 in 1950-51 to 49 in 1955-56. States like Assam, Bihar, Madhya Pradesh, Uttar Pradesh and West Bengal had less than 40 members in the average agricultural credit society. The proportion of rural families who are members of co-operative societies is small almost everywhere and even in the more advanced States the proportion rarely exceeds one-fifth. Because of the small membership, the capital structure of most primary societies is weak. While the average paid-up share capital for the country as a whole

rose during the plan from Rs. 727 to Rs. 1051, in several States, such as Assam, Bihar, Madhya Pradesh and West Bengal, the average paid-up share capital was less than Rs. 500. Similarly, while the loan operations of credit societies have increased from an average of Rs. 1983 in 1950-51 to Rs. 3102 in 1955-56, at the one end there are States like Bombay with an average of Rs. 11,553 and Madras (including Andhra) with an average of Rs. 6,609, and at the other there are States like Bihar with an average of Rs. 481, Uttar Pradesh with Rs. 1268, and West Bengal with Rs. 1244. The proportion of over-dues to loans outstanding which stood at 25 per cent in 1955-56 for the country as a whole was as high as 48·7 per cent in Bihar, 32·3 per cent in Bombay, 35·7 per cent in Uttar Pradesh, 38·9 per cent in Hyderabad and 30·7 per cent in Travancore-Cochin. These are some of the problems to which it is necessary to give special attention in the reorganisation of the co-operative movement during the second five year plan.

CO-OPERATIVE MARKETING AND DISTRIBUTION

11. At the end of the plan there were 9000 primary marketing societies, 2000 marketing federations and 16 State marketing societies in the country. Of these, the cane unions in Uttar Pradesh may be specially mentioned. They were responsible for marketing 95 per cent of the sugarcane required by sugar factories. They also supplied to their members substantial quantities of fertilisers and seeds. The main factor in the contribution which these cane societies make is the obligation imposed by law on sugar factories to purchase cane only from co-operative societies. Other types of marketing societies have been less successful. During the days of control some of the marketing societies, without building proper organisation at the base, took up activities like distribution of cloth, food-grains etc., and dealt with a large body of non-members. After decontrol when they had to compete with traders in the open market, they found it difficult to hold their own and their membership as well as volume of business began to decline. There are, however, a limited number of marketing societies in parts of Bombay, Madras and Andhra which have acquired a good deal of experience in the marketing of cotton and groundnut.

12. Marketing and other types of societies can render considerable assistance to the growers by supplying requisites of agricultural production. In Uttar Pradesh, Bihar, Madhya Pradesh and the Punjab co-operatives are the sole distributors of chemical fertilisers. Taking the country as a whole, about 50 per cent of the total quantity of chemical fertilisers is at present handled by co-operative organisations. In Uttar Pradesh, more than 1200 co-operative stores are engaged in supplying improved seeds as well as fertilisers.

13. In view of the importance of processing as an aid to marketing, especially in respect of commodities like cane, cotton, oil-seeds, jute etc., a recommendation was made in the First Five Year Plan to the effect that co-operatives should be given preference in the matter of issue of licences and grant of other facilities. Towards the end of the plan period licences were issued for 15 co-operative sugar factories and the Central Government advanced a loan of Rs. 130 lakhs to State Governments for enabling them to participate in the share capital of these units. Two co-operative sugar factories were able to start operations by 1955-56.

14. Co-operative cotton ginning societies continued to make progress, especially in Gujerat—there were in all at the end of the plan 13 ginning and processing societies with a membership of 92 marketing societies and 9795 individuals, ginning 12.5 lakh maunds of cotton during the year 1954-55.

URBAN CO-OPERATIVES

15. All the institutions discussed so far, namely, credit societies, marketing societies, processing units, etc., benefit the rural population. The requirements of persons living in cities and towns are met by urban banks, salary earners societies, societies of mill workers etc. At the end of the plan there were nearly 10,000 urban co-operative societies with a membership of nearly 3 million and a total working capital of about Rs. 85 crores. Special mention may be made of urban banks, of which at the end of the plan 200 existed in Bombay, 167 in Madras, and 66 in Andhra. These banks have total owned funds amounting to Rs. 7 crores and deposits from the public amounting to Rs. 24 crores. Urban co-operative banks meet the requirements of a number of small businessmen and others who formerly depended on urban money lenders. They also advance small loans against gold and silver ornaments, besides providing banking facilities and sometimes operating safe deposit vaults.

16. There are also more than 3000 co-operative societies of salary earners, mostly employees of Government and semi-Government institutions. These have a membership of about a million and have collected deposits amounting to about Rs. 12 crores.

INDUSTRIAL CO-OPERATIVES

17. The progress of industrial co-operatives depends essentially on the pace at which village and small-scale industries are developed. Until about 1953 programmes for village and small industries were relatively small in scope. With the establishment, however, of the Handloom Board, the Khadi and Village Industries Board, the Handicrafts Board, the Small-Scale Industries Board, and the Central Silk Board, the formation of industrial co-operatives in a number of industries received fresh support.

18. Soon after its inception, the Handloom Board took the decision that all assistance from the cess on mill-made cloth should be utilised for the handloom industry within the co-operative fold. It was realised that only through co-operative organisations could handloom weavers be effectively assisted. Except for the grant of the rebate on sales of handloom cloth, which was extended to weavers organised in co-operatives and, under certain conditions, to others, all financial assistance was confined to co-operatives. The number of looms in the co-operative sector increased from 6.82 lakhs in October 1953 to 10.27 lakhs in April 1956. The total number of weavers' co-operative societies at the end of the plan exceeded 7000. Out of 10.27 lakh looms, Andhra accounted for 1.25 lakhs, Madras for 1.54 lakhs, Uttar Pradesh for 1.02 lakhs, Hyderabad for 1.49 lakhs and Bihar, Bombay, Madhya Pradesh each a little less than 1 lakh looms.

19. The Khadi and Village Industries Board did not directly organise industrial co-operatives, but it extended financial assistance to registered institutions and to co-operative societies. Thus in different States, the Board assisted 261 industrial co-operatives, of which 51 were concerned with gur and khandsari, 49 with palm gur, 29 with leather, 53 with oil, 14 with soap-making, 13 with the manufacture of paper and others with such industries as bee-keeping, match, pottery, etc. Over 100 co-operative societies received the half-anna subsidy on the production and retail sales of khadi provided by the Board. Co-operative societies were also utilised in the Ambar Charkha programme.

20. The Handicrafts Board gave assistance to co-operatives through State Governments over an extensive range of industries such as the manufacture of mats, druggets and carpets, lacquer-ware, artistic wood work, silver filigree, stone-work, pottery, sandalwood carving, calico printing and others.

21. The Small-Scale Industries Board also encouraged the establishment of industrial cooperatives, but the bulk of the assistance in this field was given to small-scale entrepreneurs and middlemen engaged in organising the production of artisans with a view to meeting Government indents and sale of products through the trade.

22. A few silk reelers' co-operatives organised by State Governments received assistance during the plan period from the Central Silk Board. The Board realised that for the development of the industry and for stabilising conditions, the organisation of industrial and rural co-operatives was essential. However, beyond formulating a broad approach, it could not undertake any considerable programme for setting up co-operatives. The marketing of raw silk, the supply of equipment and manure, assistance in the disposal of cocoons and

short-term loans to silk reelers were the main directions in which co-operative effort could be developed; it was felt that the stage had not yet reached for the preparation and supply of mulberry grafts or for actual production through co-operatives.

TRAINING AND ADMINISTRATION

23. The success of co-operatives depends largely upon their ability to perform efficiently the functions assumed by them, whether these relate to production, marketing, credit or construction. The loyalty of members can be retained, not so much on the basis of agreement or of contract, as on the strength of goodwill secured by rendering prompt and satisfactory service. It was pointed out in the First Five Year Plan that co-operatives were some-times organised and administered by those who lacked both qualifications and experience necessary for the task. This led to failure and uneven development. In the Plan, therefore, a provision of Rs. 10 lakhs was made for assisting State Governments in improving training facilities for co-operative personnel.

24. In 1953 the Government of India and the Reserve Bank of India jointly set up a Central Committee for Co-operative Training. The Committee was placed in charge of training facilities for senior, intermediate and subordinate staff of the co-operative institutions. Since its establishment, this committee has organised (1) a college for training senior officers, (2) five regional training centres for staff of intermediate category, and (3) eight institutes for training block level co-operative officers to be posted in national extension service blocks.

25. On the advice of the Central Committee, the Government of India sanctioned financial assistance for starting training courses in 37 institutions situated in different States. The number of persons trained as a result of the programme organised by the Central Committee is given below:—

Category of Staff	Number of persons trained during 1953-56
Higher	230
Intermediate	341
Block level co-operative personnel	310
Subordinate personnel	2711

26. The need for member-education was also stressed. In this connection, mention may be made of four pilot projects in member-education initiated by the All India Co-operative Union.

27. Co-operative departments continued during the first five year plan to be on the whole weak. In some States the number of societies in the charge of a supervisor was too large, and there were also shortages of auditors. The arrears of audit increased and the supervision provided proved insufficient. In national extension and community project areas, block officers for co-operation were appointed but the numbers in which these officers were available fell short of requirements and there was some diversion of trained departmental personnel to national extension and community project areas from other areas.

RURAL CREDIT SURVEY

28. In August 1951, the Reserve Bank of India appointed a Committee of Direction to plan, organise and supervise a survey of the credit position in rural areas throughout the country, to interpret the results of the survey and to make recommendations. The survey, which was conducted in 1951-52, involved a study of the assets, economic activities and credit operations of 130,000 families resident in 600 villages in 75 selected districts. The results of the survey which have since been published provided a mass of valuable information regarding rural economic conditions as they existed in the early years of the first five year plan. The conclusions and recommendations of the Committee of Direction were taken into consideration in formulating programmes of co-operative development under the Second Five Year Plan. Among the important recommendations of the Rural Credit Survey were those relating to the nationalisation of the Imperial Bank of India, State partnership in cooperatives at various levels, provision of short-term finance on the basis of anticipated crops, organisation of large-sized credit societies with limited liability and organisation of co-operative credit in association with marketing and processing.

CHAPTER VI

ANIMAL HUSBANDRY AND FISHERIES

A. ANIMAL HUSBANDRY

THE First Five Year Plan provided for cattle improvement through the establishment of key villages and artificial insemination centres and through the expansion of veterinary facilities. The Plan made an allotment of about Rs. 22 crores for animal husbandry and dairying, the total expenditure incurred over the five years being about Rs. 16 crores. Expenditure during 1955-56 was about Rs. 5 crores.

2. *Key village scheme*: The 'Key Village Scheme' aims at systematic multiplication of available superior germ-plasm in selected areas for country-wide distribution with the ultimate object of increasing milk production and the working efficiency of the cattle population. It was taken up in August, 1952 in continuation of an earlier 'key farm scheme' which had been tried out on a pilot basis by the Indian Council of Agricultural Research. Under the scheme a 'key village block' consists of one artificial insemination centre along with 4 key village units attached to it. Each key village unit is a compact area of contiguous villages having a population of about 500 cows and/or she-buffaloes fit for breeding and milk supply. A target of 150 artificial insemination centres and 600 key village units was set for the first five year plan. By the end of 1955-56, 144 artificial insemination centres and 574 key village units had been established.

3. The key village scheme is intended to provide for all aspects of cattle improvement, such as, breeding, feeding, management, disease control and marketing. Bulls supplied to key villages are of known pedigree and their selected improved male progeny are reared as bulls for systematic distribution in the surrounding areas with a view to upgrading the indigenous stock. Legislation for livestock improvement and control of contagious diseases is an essential pre-requisite for the success of the scheme. Such legislation now exists in all States except Assam, Orissa, Rajasthan and U.P. Superior breeding bulls with good pedigree are stationed for artificial insemination at the artificial insemination centres and for natural service in the key villages. A total of about 848 bulls and 304 buffalo bulls of recognised breeds were located at the artificial insemination centres established during the first plan. Along with the introduction of superior germ-plasm it is also essential that in

the selected areas all scrub bulls should be eliminated. This programme is being followed in all the areas and in 1955-56, 37,502 male cattle were castrated.

4. During 1954-55 a scheme for subsidizing and rearing selected calves produced in key village areas was also initiated. Under this scheme superior calves are selected at the age of about 6 months and are subsidised till they attain the age of 3 years or maturity. During 1955-56, 1873 calves were subsidised in the States of Andhra, Bihar, Bombay, Madras, Travancore-Cochin, Ajmer, Bhopal and Delhi.

5. Although the principal aim of the key village scheme is to produce a sufficient number of superior bulls to meet the existing shortage in the country, yet due to the late initiation of the scheme and time taken by the bull-calves to attain maturity only 268 approved bulls could be obtained from key village blocks during 1955-56 for stud purposes in various States. It is anticipated that larger numbers of improved bulls will be available in the key village areas for distribution during the coming years. In some States the scheme is very recent and the key village centres cannot yet provide superior breeding bulls of mature age. In a few States where the cattle are at present of a non-descript type, the interval will be even longer. In such areas efforts are also being made to improve the quality of breeding cows by subsidising a substantial number of selected female calves out of high yielding dams, besides grant of *taccavi* loans by the State Governments for the purchase of pure-bred milch stock.

6. The adequate supply of nutritional requirements of cattle, both for improved milk production and draught, is an essential item in the key village programme, but so far much progress has not been made in this direction. Nor has much progress been made in the organisation of proper facilities for the profitable marketing of improved livestock and livestock products along cooperative lines. An effort has been made to promote the formation of small cattle breeders' cooperative societies which may form the nucleus for the expanded activities to be taken up later.

7. As the plan proceeded, in the light of the practical experience gained, the following policy was evolved:

- (1) Key village blocks should be located only in such areas which are homes of defined breeds and where the public will extend its full cooperation;
- (2) States without livestock improvement and control of animal contagious diseases Acts should enact such legislation;
- (3) Where pedigree bulls cannot be obtained, the best available bulls should be selected from key villages and other areas for extension work;

- (4) New Government farms should be established for those breeds which are important for upgrading work and are not at present served by specialised farms; and
- (5) For complete and successful recording of milk production in the key village blocks additional staff should be appointed. Milk production of 20 per cent of cows selected at random should be recorded in areas where the cattle are of defined breeds and where the policy of selective breeding is to be adopted.

8. *Gosadans*: The First Five Year Plan proposed the establishment of 160 gosadans at a cost of Rs. 97 lakhs. But later, the provision was reduced to Rs. 15 lakhs and the target was reduced to 40 gosadans. Under this scheme, old, infirm and useless cattle are segregated and sent to gosadans located in remote forests and other waste lands where grazing facilities are not fully utilized. All male stock were castrated before admission into the gosadans. The remains of dead animals such as skins, hides and hoofs, etc. were to be utilised by setting up a small 'charmalaya' at each centre. By the end of the plan period, the establishment of 34 gosadans had been sanctioned, of which 25 gosadans only were actually set up. These included 10 private gosadans. The gosadans handled about 22,106 heads of cattle. The main difficulties encountered in the implementation of the gosadan scheme have been the non-availability of suitable blocks of lands, lack of adequate transport facilities over long distances and in some States the absence of legislative sanction for removing unproductive and stray cattle to gosadans. State Forest Departments have now been entrusted with the responsibility of providing suitable sites in remote areas which may be accessible throughout the year and where sufficient grazing and drinking water facilities are available. Experience has shown that the implementation of the scheme can be facilitated by measures such as the following:

- (1) Transport should be provided free of cost for the despatch of old and useless cattle;
- (2) Existing goshalas should be used as collection centres for old and useless cattle;
- (3) Private institutions desirous of setting up gosadans, having adequate grazing lands, should be financially assisted for the construction and modification of existing cattle sheds and enclosures;
- (4) For gosadans to run economically, well-equipped *charmalayas* should be established at each State type gosadan with necessary equipment and machinery for flaying and curing of hides and economic utilisation of the carcasses.

9. *Disease Control*: The Plan provided for the establishment of 650 veterinary dispensaries. This programme has been carried out and during 1955-56, 192 dispensaries (including 13 mobile units) were set up.

10. *Rinderpest eradication*: About 60 per cent of the mortality caused by cattle diseases is attributed to rinderpest. The eradication of rinderpest had, therefore, a high priority in the first five year plan. With a view to gaining knowledge and experience in tackling the problem on a countrywide scale a pilot project was launched in October 1954 for the eradication of rinderpest in all the States in the South up to the river Krishna. Against 9 lakhs of animals vaccinated in 1954-55, 55 lakhs were vaccinated in the following year. The Plan provided about Rs. 16 lakhs for rinderpest eradication.

11. *Poultry Development*: To stimulate poultry development as a subsidiary industry in the rural areas, a pilot project was approved early in 1955, under which 50 extension centres were to be established during 1955-56. By the end of the plan 33 centres had been established, and were in different stages of development. The scheme is assisted under the Indo-U.S. technical cooperation programme.

12. *Veterinary Education and Training*: The shortage of veterinary trained personnel was felt acutely as the plan proceeded. Four new veterinary colleges were established in the States of Andhra, Orissa, Madhya Bharat and Travancore-Cochin. At a number of existing colleges, facilities for training were expanded. Double shifts were introduced in the veterinary colleges in Bihar, Bombay, Punjab, Hyderabad and Rajasthan and nine emergency diploma course centres with a total capacity of 823 were established. As a result of the steps taken during the first plan, the annual admissions of veterinary graduates increased from 397 in 1953-54 to 1283 in 1955-56.

13. *Dairying*: A number of States had programmes of dairy development during the first five year plan. In Bombay State, besides further development at the Aarey milk colony, milk supply schemes were taken up at Poona, Hubli and Dharwar; a new dairy was established at Anand with assistance from UNICEF, and dairy surveys were carried out in several areas. In Madhya Pradesh, the number of dairy units increased from 7 to 11. Orissa established 8 subsidised dairies, of which 3 were established in the last year of the plan. Andhra introduced milk supply schemes in Kurnool and Guntur. Madras operated a number of cooperative milk supply schemes, which had, at the end of the plan, a daily output of over 29,000 maunds. Amongst other measures, the State Government advanced loans to co-operative societies for the purchase of milch

cattle. In 1955-56 these societies purchased 2,740 milch cattle. In U.P. in 9 towns there are co-operative milk unions with well-equipped dairies where milk collected from rural areas is pasteurised prior to distribution. In Bihar similar unions have been set up in 3 towns. The instances cited here indicate growing interest in dairy development with a view to meeting the requirements of urban areas, but it must be admitted that so far even the fringes of the problem have been barely touched.

B. FISHERIES

14. Prior to the First Five Year Plan very little attention had been given to the development of fisheries. The Plan provided Rs. 4.65 crores for fisheries development. On account of delays in the receipt of equipment and lack of personnel the provision was scaled downwards to Rs. 3.89 crores. The expenditure incurred during the plan period was Rs. 2.78 crores. From an average expenditure of about Rs. 40 lakhs a year expenditure in 1954-55 rose to about Rs. 54 lakhs and in 1955-56 exceeded Rs. 1 crore. During the plan period the marketable surplus of fish is estimated to have risen from 800,000 to about 1 million metric tons. Assistance for fisheries schemes has been obtained from the Food and Agriculture Organisation and under the Indo-U.S. and Indo-Norwegian technical co-operation programmes.

15. The principal measures taken for the development of marine and inland fisheries during the first five year plan fell into the following groups.—

- (i) improvement in the existing methods of fishing;
- (ii) bringing under fish culture large areas of water at present lying fallow;
- (iii) introduction of new methods of scientific fish farming;
- (iv) introduction of improved forms of storage, transport and marketing; and
- (v) training of personnel and organisation of extension methods for assisting fishermen.

16. For the development of inland fisheries a number of State Governments undertook surveys of culturable waters and reclamation of derelict tanks and stocking them with fry and fingerlings. Thus, in Bombay 11,662 acres of culturable waters were surveyed, and in Vindhya Pradesh 5,850 acres. In West Bengal short-term loans were given by the State Government for bringing about 9,458 acres of water area under pisciculture. Stocking of inland waters with fry and fingerlings was undertaken in a number of States, notably Madras, Uttar Pradesh, Andhra, Bombay and West Bengal.

17. In the field of marine fisheries the States concerned took steps to supply fishery requisites, such as boats, yarn for nets, timber, sail cloth, etc. to fishermen at concessional rates. They also carried forward schemes relating to the mechanisation of fishing operations. Thus, the West-Bengal Government distributed among fishermen 445 bales of yarn for making fishing nets and 353 boats over the plan period. Similar action was taken by other States such as Saurashtra. In the mechanisation of indigenous craft considerable work was done in Bombay where 600 boats were motorised. In the various maritime States attempts have been made to evolve new types of boats or new designs for existing boats.

18. Exploratory fishing with different types of powered vessels was undertaken on a larger scale than before in the last year of the plan. The vessels of the Central Deep-Sea Fishing Station, Bombay, completed the charting of 17,000 sq. miles of sea off the coasts of Saurashtra and Bombay within the 40 fathom line. The West Bengal Government operated five trawlers which undertook 166 exploratory trips and brought in 1,652 tons of fish. The possibilities of commercial exploitation of fish in the Bay of Bengal were established by recent work done by the West Bengal Government.

19. Shortage of trained personnel has been one of the principal handicaps in the field of fisheries development. The steps taken by various States have not made a sufficient impression on this problem. The plans of 10 States provided training schemes but with the exception of Bombay and Madras these were quite modest in scope. Short-term training courses were provided for lower grade personnel and for personnel working in community project and national extension areas in Assam, Bihar, Madras and Orissa. Five centres for training of about 200 fishermen in each year in the methods of mechanised fishing were established during the first plan. This is a practical course of training lasting for six months for which stipends are given by the State Government. Similar training centre had been organised in 1954 at Neendkara in the fisheries community project under the Indo-Norwegian programme. Here the training is followed by the grant of a mechanised boat, free of charge, for a given period during which a trainee can test out the equipments for himself and later either return it or purchase it at about 50 per cent of the cost repayable in instalments spread over several years. Training centres were also established towards the close of the plan at Cochin, Tuticorin, and Veraval, 60 trainees being admitted at each centre. Arrangements for training in power fishing operations were also made on the exploratory fishing vessels operated by the Central and State Governments. Personnel from State Fisheries Departments and some private candidates are given training in fisheries management at Calcutta, the emphasis being

on problems of inland fisheries. By the end of the plan about 117 candidates had received training.

20. Towards the end of the first plan a Fisheries Extension Unit was established under the Ministry of Agriculture. This unit transmits to fish-farmers results of research in fisheries especially in regard to the improved techniques for collection, transport and stocking of fish fry, preparation of fish ponds, eradication of weeds and predators and stocking methods.

CHAPTER VII

FORESTS AND SOIL CONSERVATION

FORESTS

THE bulk of the forests in India are State-owned and during the first five year plan additional forest areas came to vest in the State Governments. In the States, besides the protective and productive functions for which forests have to be maintained in an adequate manner, the revenues derived from forests are also an important consideration. Programmes of forest development in the States during the first five year plan were, in the main, a continuation of programmes which had been initiated earlier under post-war development schemes. These included schemes for afforestation and plantation, improvement of forest communications, preparation of working plans, demarcation of newly acquired areas with a view to their rehabilitation, improving the growing stock and strengthening of forest administration. Forest development being a matter of long-term planning, early in the plan period (1952) the Central Government in consultation with States drew up a comprehensive Forest Policy Resolution, revising the old Forest Policy of 1894 in order to bring it into line with present day requirements. Among other things, this resolution laid down the main directions of forest development. These included measures for evolving a system of balanced and complementary land use, in which forests would have their rightful place, checking denudation in mountainous regions and preventing erosion along the banks of rivers, sea-erosion and the shifting of sand dunes in desert areas. They also included measures for increasing the supply of timber and other forest produce, for the progressive improvement of fodder and grazing resources and for the establishment of tree lands wherever possible. Generally speaking, all the States adopted the revised Forest Policy and endeavoured to implement its various directions. Thus, it was the aim of the first five year plan, within the resources available, to provide for the expansion and improvement of areas under forests, for meeting the increased demand for timber and forest produce in the immediate future, and for the planning of long range development of forest resources. The total expenditure incurred in the first plan on Forests and Soil Conservation was about Rs. 12 crores.

2. In attempting to appraise the progress in carrying out forest programmes in relation to national requirements for forest produce,

there are two principal difficulties. In the first place, forest statistics, especially statistics of possibility and of out-turn of major and minor forest produce, are incomplete and it is necessary that they should be made more precise and regular. Thus, although it is known that the requirements for various kinds of timber are steadily increasing and the supplies are not keeping pace, it has not been possible yet to formulate a detailed programme for meeting the gaps. Secondly, reports on the progress of implementation of forest programmes from several State Governments fail to provide the information needed. Both these aspects deserve greater attention.

3. During the first plan, afforestation, rehabilitation and plantation works were carried out over an area of about 75000 acres. In Saurashtra a scheme for renovating the Gir forest was taken up in 1954-55. In Bihar two divisions were set up for afforestation work, one in Hazaribagh and the other in North Bihar. The former afforested an area of about 5500 acres and the other carried out a detailed survey of lands suitable for afforestation, besides undertaking some afforestation. Assam exceeded its afforestation target of 4445 acres. In West Bengal about 3000 acres of waste lands were planted. In Pepsu an irrigated area of about 2000 acres was planted.

4. The development of forest communications was one of the principal programmes in the States. Forest roads exceeding 3,000 miles in length were constructed or improved during the plan period. Of this, 352 miles of roads were constructed or improved in 1955-56. Assam constructed 305 miles of new roads and improved 568 miles. In Bihar about 900 miles of roads were constructed, in Orissa about 402 miles and in Madhya Bharat 843 miles. In Madhya Pradesh 230 miles of roads were constructed or repaired.

All this, in turn led to motor lorry transport, progressively replacing bullock carts in the extraction of timber and forest produce from the forests to markets or to rail-head stations. As a result, during the first five year plan several forest areas were rendered accessible all the year round and other hitherto inaccessible areas (where timber exploitation could be undertaken) were opened up.

5. Owing to the abolition of zamindari and the merger of the princely States, more than 20 million acres of forest land under private ownership were brought under State control and the administrative set-up was strengthened. Madras and West Bengal set up new forest divisions for taking over private forests and for implementing new plans of afforestation in predominantly agricultural districts. In some States schemes suited to local needs were drawn up and cooperative societies associated with forest management and working. At the end of the plan there were, for instance, in the Punjab, 73 forest cooperative societies responsible for a

forest area of 59,484 acres of which 39,756 acres were stated to have been brought under scientific management. Again, in Bombay State, co-operative societies of forest workers were encouraged to replace contractors in the working of fuel and small forests.

6. A feature of the first five year plan was the raising of plantations of industrial importance with a view to meeting the increasing demand from industries such as the match industry, plywood and the manufacture of packing cases, bobbins and sports goods, tanning and drugs. Many of the plantations were established in areas which contained little tree growth or in which the forests had been over-exploited in the past under private ownership and were in need of rehabilitation. The plantations also helped to check erosion and the spread of arid and desert conditions. In Uttar Pradesh an area of over 16,250 acres was planted. Madras covered an area of about 8000 acres with match wood, wattle, blue gum and casurina plantations. Mysore brought an area of about 2,100 acres under casurina and eucalyptus and over 40 acres under cinchona. In Rajasthan 2,009 acres of land and in Madhya Bharat 1,073 acres were brought under plantations and in the former State attention was also given to the development of nurseries. Assam carried out its programme for planting 1,000 acres under cinchona and 600 acres under wattle.

7. A few schemes for the regulation of forests as envisaged in the Forest Policy Resolution and for the economic utilisation of timber and other forest products were taken in hand during the plan. Particular mention might be made of measures taken for the rehabilitation of degraded forests and the improvement of fuel and timber forests.

8. A timber trends survey of the country was initiated towards the close of the plan period, in collaboration with the Food and Agriculture Organisation and the Economic Commission for Asia and the Far East. This survey will be on the same lines as that recently completed for Europe. The object is to collect data for timber and other important forest produce regarding production, utilisation, consumption and end-uses, study present demands and indicate future trends. This survey, when completed, is expected to assist in assessing the existing gaps between demand and supply of forest produce in the country. It was estimated that this survey would conclude in 1957.

9. A programme for clearing forests and settling colonisers in Andaman and Nicobar Islands was included in the territories' five year plan. Clearing was by contractors agency in the North island and by the Forest Department in the Middle and South islands. By the end of 1955, 5,000 acres were cleared and about 1000 families were settled, the total expenditure being Rs. 68 lakhs.

10. Work on Delhi Zoological Park was begun. This project aimed at establishing a natural zoological garden in the capital. Initial difficulties regarding site, staff and technical advice were overcome by the end of the plan period.

11. Facilities for higher education in Forestry were enlarged during the first plan. Annual admissions to the Indian Forest College, Dehra Dun were increased from 30 to 40, thus assuring an addition of 30 officers for the States Forest Departments by the end of the plan period. Equipment worth about Rs. 4 lakhs was to meet the needs of further expansion. Arrangements were also finalised for the training to be expanded from 1956 into a 3-year course from the existing 2-year course.

Facilities for training Forest Rangers were also expanded. By the end of the first plan provision was made for an annual intake of 40 candidates at each of the two Centres, viz., Dehra Dun and Coimbatore, with additional capacity to double the classes when found necessary. Neighbouring countries like Ceylon, Nepal and East Africa began to avail themselves of these courses.

Training at the sub-professional levels (Foresters and Forest Guards) was left to the States, but the Central Government established a Foresters' training course of twelve months' duration at Coimbatore to serve the Southern States. Assam, West Bengal, Orissa, Uttar Pradesh, Madhya Pradesh, Rajasthan, Punjab, Jammu and Kashmir and Bombay established schools of their own for training Foresters to meet their increased needs.

12. At Dehra Dun, which was the only centre for co-ordinated forest research, 34 special schemes were drawn up by the Forest Research Institute but owing to delays in procuring suitable staff and equipment, many of them could be initiated only towards the end of the plan period. Additional accommodation was constructed secured under the Indo-U.S. technical co-operation programme. The following schemes were taken in hand and progressed during the period:—

- (i) Introduction of Malayan cane in India.
- (ii) Establishment of a wood working laboratory.
- (iii) Revision of Gamble's Manual of Indian Timbers.
- (iv) Construction of glass houses for mycological studies.
- (v) Studies in the protection of timber against marine organisms.
- (vi) Preservative treatment of green bamboos.
- (vii) Testing durability of treated and untreated timbers.

Experimental work was organised for the improvement of indigenous canes and for the introduction of Malayan cane into India. Seeds of good varieties, as also planting stock, were obtained from the Philippines, Thailand, Indonesia and Malaya and (after the requisite preliminary trials) were introduced in Assam and Kerala and at Dehra Dun. Methods were being evolved for improving the quality of indigenous varieties in order that they might compare favourably with imported canes. Technical advice was rendered to States for initiating regular plantations in appropriate localities. It is hoped that these measures will result in the better management and production of this commercially important forest produce and that the present considerable shortage (caused by over-exploitation, absence of attempts at regeneration and even at conservation of cane areas as such) will be overcome in due course.

The first instalment of the revised, enlarged and up-to-date edition of Gamble's Manual of Indian timbers was nearing completion. The publication is being illustrated by photographs of micro-slides prepared specially for the purpose.

Micro-biological studies (to be undertaken for the first time) of forest soils will be facilitated by the glass houses constructed for the Mycology Branch at the Forest Research Institute.

With the establishment of six field stations in important coastal centres, satisfactory progress was made in carrying out the scheme for the study of damage to timber in marine installations.

The methods developed for the preservative treatment of green bamboo held out promise of bamboo proving to be the poor man's timber.

SOIL CONSERVATION

13. During the first five year plan soil conservation began to receive for the first time the priority due to it in the scheme of national development. The aim of soil conservation would be to protect the top layers of the soil which was apt to be constantly shifted from one area to another by wind and water. A preliminary survey showed that about 25 per cent of the country's surface was in need of soil conservation measures. Of the total area of the country, it was estimated that about 200 million acres of land were exposed to hazards of wind or water erosion, and of lands actually under cultivation, about 100 million acres were vulnerable to erosion. Lands which would lie fallow for several months also required conservation measures. The western desert alone accounted for about 50 million acres; of this about 5 million acres would have to be afforested and the rest dealt with through such conservation programmes as closure and rotational grazing for the improvement

of pasture lands. In hilly tracts 50 million acres of land occupied by pastures, waste lands and ravines, including catchment areas of river valley projects, required levelling, terracing, gully plugging, turfing and planting of trees.

14. To carry out the soil conservation programme recommended in the First Five Year Plan, the Central Soil Conservation Board was set up by the Ministry of Food and Agriculture towards the end of 1953. The Board assisted State Governments and river valley authorities in drawing up plans, arranged for training of technical personnel for this new field of service, acted as a clearing house for information and recommended financial assistance for States' schemes. It made itself also responsible for research, demonstration and extension work in soil conservation. Besides expenditure on such Centrally administered items, the Board sanctioned for Soil Conservation programmes a total expenditure of Rs. 47 lakhs. State Soil Conservation Boards have been established in 18 States.

15. Regional research stations have been established by the Central Soil Conservation Board at Dehra Dun, Kotah, Bellary, Ootacamund and Vasad (Anand). A Desert Afforestation Research Station was established at Jodhpur. These centres provide for training, demonstration and research in soil conservation. The Dehra Dun centre is concerned with erosion problems in the Himalayas and, in particular in the Siwalikes, the centre at Kotah with gully and ravine formation on river-banks in alluvial soil, the centre at Bellary with soil conservation problems of black soil, the centre at Ootacamund with problems of hill-side erosion in the Nilgiris, and the centre near Anand with soil conservation problems of ravine areas in Gujarat. The Jodhpur research station was started for investigating methods of desert control by creating vegetation and shelter belts to improve the desert. The station has established nine nurseries in the Western parts of Rajasthan, where trees and grasses are raised for experimental afforestation, planting of avenues and distribution to various agencies. During the three years 1952-55 about 71,000 lbs. of seeds of different species were distributed. Trees have been planted over 150 miles of roads, desert afforestation undertaken over an area of 30 sq. miles and a total area of about 100 sq. miles earmarked for the improvement of pastures and for experimental plantations.

16. It was estimated that by the end of the first plan a total area of 300,000 acres of land had been treated for soil conservation. This includes 150,000 acres of contour bunding on agricultural land and afforestation of 11,256 acres of denuded land. During the plan some States also undertook fairly substantial soil conservation programmes of their own. In Bombay contour bunding covered an

area of 600,000 acres, of which about 100,000 acres were covered in 1955-56. In Andhra soil conservation schemes were carried out in red and black soil areas in the districts of Anantapur and Kurnool. Contour-bunding, gully-plugging, contour-cultivation, etc., were carried out over more than 7,000 acres. In Assam 9 centres were set up for training tribal people in the methods of permanent cultivation and in the cultivation of cash crops. West Bengal afforested 12,438 acres of Government waste lands with a view to checking soil erosion, and Madras undertook soil conservation measures over an area exceeding 8,000 acres, besides covering nearly 3,000 acres with fuel species on low hill slopes. In the Punjab soil conservation operations were undertaken over an area of 19,000 acres. In Saurashtra, a large number of check dams and bunds were thrown across rivers and rivulets to prevent erosion. Rajasthan, Himachal Pradesh and a number of other States also carried out soil conservation programmes, although in several of these work was hampered for want of trained personnel and the sanctioned funds could not be utilised in full.

17. Programme of soil conservation in the catchment areas of River Valley Projects was recommended in the First Plan. Adequate steps for soil conservation in catchment areas are essential to the proper development of water resources and for preventing silting in dams and rivers. If these measures are not taken and erosion goes on unchecked in the catchment area, the erosion will increase the cost of operation, impair efficiency and reduce the life of dams and reservoirs. The Soil Conservation Board has sanctioned a land use survey organisation with its headquarters at Dehra Dun and 3 regional divisions at Dehra Dun, Ranchi and Nagpur. These organisations will undertake land use survey in the catchment areas of River Valley Projects and to start with, the work will be confined to the six major projects, namely, Kosi, Damodar, Machkund, Hirakud, Bhakra and Chambal. A field research and demonstration centre has been sanctioned for Chhatra to suggest measures to conserve soil in the catchment area of the Kosi River. The Soil Conservation Board has also rendered financial assistance to some States in the execution of their soil conservation work in the River Valley Projects and the State Governments have been asked to conduct surveys and submit detailed schemes for soil conservation for consideration of the Board for financial assistance.

18. During the plan period 20 gazetted and 119 other officers were trained at the regional research stations established by the Central Soil Conservation Board. Subordinate personnel were trained in centres established in the States. Arrangements were completed for stepping up training facilities during the second plan period. Training facilities were also provided at the soil conserva-

tion centre at Hazaribagh organised by the Damodar Valley Corporation. The States of Uttar Pradesh, Bombay and Saurashtra established their own training centres, and in several States pilot demonstration project were also taken up.

19. The First Five Year Plan had recommended the enactment of legislation giving power to Government to execute specified improvements and allocate costs between Government and cultivators, constitute cooperative organisations for soil conservation work and restrict uses and practices in areas declared as "protective areas". The Central Soil Conservation Board completed a study of the existing legislation and of legislation under consideration in different States with a view to draw up a Bill for Soil Conservation in the country. Amongst other provisions, the Bill would envisage regulation and restriction or prohibition on misuse of land in specified areas and would provide for compensation to owners of lands acquired for soil conservation. The Bill would also empower State Governments to set up boards which can prepare plans for soil conservation and land improvement, appoint district committees to deal with local and regional soil conservation problems, and take such other measures as may be needed in support of the soil conservation programme.

CHAPTER VIII

IRRIGATION AND POWER

In irrigation and power development it is necessary to have a long-term plan on which programmes for five year periods might be based. It was laid down in 1951 that over a period of fifteen years, the general aim should be to double the irrigable area under multi-purpose, large and medium projects and to increase power capacity from 2.3 million kW to 9.3 million kW. The programme adopted for the first five year period of planning was, thus, conceived as a stage in a programme extending over a much longer period, in which each phase would merge into the next. In drawing up an irrigation programme, there has to be a balance between projects which yield results over relatively short periods and large and multi-purpose projects, which take several years to yield results. There has also to be a programme of minor irrigation schemes undertaken, with a measure of help from the Government, by the people individually or in groups as scope for these exists practically all over the country. Similarly, in the programme of development of power, a balance has to be struck between hydel and thermal power.

2. Although the majority of irrigation and power projects approved in the First Five Year Plan had been decided upon before the Plan commenced, at about the middle of the plan period the programme was expanded. On completion, the projects undertaken in the Plan were expected to bring under irrigation a total area of 33 million acres, of which 11 million acres were to be irrigated by minor works including tubewells and 22 million acres by large and medium projects. The total installed capacity of power schemes undertaken was estimated at 2.5 million kW. Broadly, four stages may be traced in the development of the irrigation and power programme of the first plan. In July 1951, when the Draft Outline of the First Five Year Plan was issued, it contained projects estimated to provide additional irrigation of 16.9 million acres and 1.4 million kW of installed power capacity. Of this, the Bhakra Nangal, Hirakud and Damodar were to contribute 6.5 million acres in irrigation and 338,000 kW in power capacity. By December, 1952, when the final version of the Plan was presented, five new multi-purpose projects had been included in the Plan. These were the Chambal, the Kosi, the Rihand and the Koyna and

a project on the Krishna river. Together, these projects were expected to provide additional irrigation to about 4.5 million acres and to add 560,000 kW to installed power capacity. The third stage came about a year later when a number of medium-sized irrigation projects were included in the Plan mainly with the object of bringing about permanent improvements in areas which have long suffered from conditions of chronic scarcity. Finally, in the latter part of 1954 as a result of the floods which visited several States in that year, flood control programmes were given special emphasis and new agencies for guiding and executing them were set up. On the power side also, in 1954 new schemes were taken up for relieving unemployment by expanding power facilities in small towns and rural areas.

3. Irrigation and power accounted for about 29 per cent of the outlay during the first five year plan. A number of large projects had been initiated shortly before the plan commenced, so that during the period of the first plan the scales were weighted somewhat in favour of large schemes. The statement below shows the distribution in terms of total cost and outlay during the first plan of irrigation and power projects (excluding flood-control schemes).

Cost	Number of Projects	Total estima- ted cost (Rs. crores)	Total outlay (Rs. crores)
1	2	3	4
1. Rs. 30 crores and above	9	623	233
2. Between Rs. 10 crores and Rs. 30 crores	10	172	77
3. Between Rs. 5 crores and Rs. 10 crores	9	64	26
4. Between Rs. 1 crore and Rs. 5 crores	103	256	154
5. Less than Rs. 1 crore	337	135	79
TOTAL	468	1250	569

While a number of large projects had been accepted for the plan on considerations of regional development, it was indicated that new projects involving considerable expenditure would be taken in hand only as work on the older projects reached an advanced stage. Thus, while projects estimated to cost less than Rs. 10 crores each accounted for about a third of the cost of the programme as a

whole, expenditure on them represented about 45 per cent of the estimated outlay during the plan period. Technical problems and such factors as supply of equipment are apt to prolong the period of construction in the case of large projects. The flow of benefits during a plan period therefore depends on the manner in which the irrigation programme is distributed between large and medium-sized projects.

4. From irrigation schemes included in the first five year plan, an area of about 8.5 million acres was expected to be irrigated by 1955-56. The total installed capacity expected to be established during the first plan was 1.3 million kW of which 1.1 million kW were to be in the public sector and 200,000 kW in the private sector. The total outlay on irrigation and power during the First Plan was Rs. 569 crores as against an initial allocation of Rs. 561 crores.

5. This chapter reviews briefly the progress achieved and some of the problems encountered in carrying out different parts of the irrigation and power programme namely, multi-purpose projects, power projects, irrigation and flood control schemes. In this review, an attempt is made to indicate changes in the scope and phasing of the more important projects which took place in the course of the Plan and to explain so far as possible differences between the results anticipated and those actually realised.

6. Many of the irrigation projects included in the First Five Year Plan had been sanctioned and work had been commenced on them before 1951. In some cases it has happened that owing to defective phasing of works, water has been stored at considerable cost which can irrigate large areas but canal and distribution systems needed for conveying the water to the fields were not ready in time. There were also projects in which the timetable prepared by States for spreading the available irrigation facilities has not been rapid enough. There are, thus, important lessons to be learnt from the experience of the past few years. In the Second Five Year Plan, special attention has been drawn to these:—

“.....phasing of irrigation and power projects and their execution should be carefully arranged to yield maximum returns from investment at each stage. Invariably it is possible through better organisation and planning to obtain large benefits from expenditure incurred. To obtain maximum results, benefits should accrue at each stage and there should be no time lag between the availability of benefits and their utilisation. All inter-related activities should, therefore, be carefully co-ordinated. The phasing of projects calls for attention from another important point of view. It is of the

utmost importance that irrigation from reservoirs should be fully utilised as soon as water is stored in them. This means, firstly, that the canal system should be completed, including field channels, at the same time as the reservoir and secondly, that the agriculturists should have their lands ready for wet cultivation when the water becomes available.... Demonstration farms should be started at selected localities and the lands, which will benefit, made fit for irrigation by the time water becomes available." (Second Five Year Plan—pages 349—350.)

I. MULTI-PURPOSE AND NEW MAJOR PROJECTS

7. On the three multi-purpose projects, Bhakra-Nangal, Damodar Valley Projects and Hirakud, which were begun before the first five year plan, about Rs. 49 crores had been spent before 1951-52. The plan itself contemplated an outlay over five years of about Rs. 163.1 crores against a total cost then estimated at about Rs. 240 crores. The expenditure incurred during the plan period on these three projects was over Rs. 201 crores, of which the Bhakra-Nangal accounted for about Rs. 86 crores, the Damodar Valley Project for Rs. 71 crores and the Hirakud for about Rs. 45 crores. The benefits anticipated and achieved from these three projects during the plan were as follows:—

	Area irrigated ('000 acres)		Installed capacity ('000 kw)	
	Plan 1951-56	Actual 1951-56	Plan 1951-56	Actual 1951-56
1. Bhakra Nangal	1361	1181	96	48
2. D.V. Projects	595	..	194	154
3. Hirakud	261	..	48	..
TOTAL	2217	1181	338	202

The Hirakud Project has been completed in 1956-57 and water let into canals for irrigation for the 1956 Kharif crop. As regards DVC, irrigation potential of 100,000 acres has been established by the end of first plan but no irrigation took place.

BHAKRA-NANGAL

8. On the Bhakra-Nangal project Rs. 25.5 crores had been spent before the first plan. Outlay during the plan period was about Rs. 85.7 crores. The Nangal Barrage and the Hydrel channel were completed in July, 1954 and the new irrigation commenced shortly

afterwards. By the end of 1955-56, the project provided irrigation mainly non-payment, to 1.18 million acres of land, of which 962,000 acres were irrigated in the Punjab, 77,000 acres in Pepsu and 142,000, acres in Rajasthan. With the completion of the Nangal Power House in January 1955, the project had an installed capacity of 48,000 kW which was doubled by July, 1956 on the completion of the Kotla Power House. With the completion of the diversion tunnels in 1954 and the coffer dams in 1955, work on the concreting of the 680 feet high Bhakra Dam commenced in November 1955. This marked the beginning of an immense undertaking which will be spread over a period of about 4 years and will involve the use of 300,000 tons of cement, 40,000 tons of steel and 5 million cubic yards of concrete. When completed, the Bhakra Nangal Project will provide irrigation to 3.6 million acres of land and have total installed capacity of 594,000 kW.

HIRAKUD

9. The Hirakud Project, largely executed during the first plan, was intended to provide ultimate installed power capacity to the extent of 160,000 kW and irrigation to the extent of 672,000 acres. Along with the Hirakud subsidiary dam which has been approved for the second five year plan, and the Mahanadi Delta scheme which was approved in 1955-56, the total installed capacity in the Hirakud system will be 232,500 kW and the irrigation potential will be 1,785,000 acres. Before the first plan Rs. 7.8 crores had been spent on the project and during the plan period the total outlay was Rs. 44.6 crores. It was expected that 261,000 acres of irrigation and 48,000 kW of installed capacity would become available by the end of the plan. Irrigation commenced in September 1956 and out of two 37.5 MW and two 24 MW generating sets under erection at the Dam Power House, one 24 MW set has been commissioned in 1956-57.

All works at the site of the Hirakud Dam, which has a length of 15.748 ft. and with the dykes runs to about 17 miles, have been completed.

D.V.C.

10. The Damodar Valley project which has a total irrigation potential of 1,141,000 acres in West Bengal and installed power capacity of 254,000 kW was begun in 1948 and about Rs. 15.5 crores had been spent before the commencement of the first five year plan. During the plan period about Rs. 71 crores have been spent on this project. The hydel power station at Tilaiya with a capacity of 4,000 kW and Bokaro Thermal Station with a total capacity of 150,000 kW were commissioned in February 1953. The Konar Dam was opened in October 1955. At the end of the first five year plan,

work was in progress on the Maithon and Panchet Hill dams. At both sites for various reasons progress had been retarded. The Maithon Dam is due to be completed in 1957 and the Panchet Hill Dam in 1958.

11. The main Durgapur Barrage was completed in April 1955, followed shortly afterwards by the completion of a 34-span bridge over the Barrage. By the end of the first plan, 58 per cent of excavation work on the main canals, branches, distributaries and drainage channels had been completed and irrigation was available for 100,000 acres although, as mentioned earlier, during the plan period no irrigation took place. In accordance with the original programme, transmission lines and sub-stations connecting Sindri, Jamshedpur, Ghatsila and Burdwan were constructed before the end of the first plan and work commenced in 1955-56 on the extension of the transmission system to Calcutta, Gaya, Patna and Dalmianagar.

NEW LARGE PROJECTS

12. The new large projects which were scheduled to Commence before the end of the first five year plan were the Chambal, a multi-purpose project serving Rajasthan and Madhya Bharat, the Kosi in Bihar, the Nagarjunasagar in Andhra and Hyderabad and the Koyna and Rihand in Bombay and Uttar Pradesh respectively. The total outlay on all these projects during the plan was Rs. 18.12 crores, of which the Chambal accounted for Rs. 5.48 crores, the Kosi for Rs. 3.93 crores, the Nagarjunasagar for Rs. 1.11 crores, the Koyna for Rs. 2.83 crores and the Rihand for Rs. 4.77 crores.

13. *Chambal*: Work on the Kotah Barrage of the Chambal Project began in 1952-53 and the Gandhisagar dam in January 1953. In April 1955, a Control Board was set up for expeditious execution of the Project. About 22.5 per cent of masonry work on the Gandhisagar Dam was completed and construction of canals was in progress over a length of 85 miles along the Right Bank Canal. This part of the project has an irrigation potential of 1.1 million acres and installed power capacity of 69,000 kW and its benefits will begin to accrue from 1959. Together with the Rana Pratap Sagar reservoir (included in the second plan), the irrigation potential will be 14 lakh acres.

14. *Kosi*: Work on the Kosi project, for which a Control Board was set up by the Central Government, commenced in January, 1955 and by the end of the first plan, a total expenditure of Rs. 3.93 crores had been incurred. The Kosi project is intended to provide protection from floods for an area of 6800 sq. miles and to irrigate an area of 1.6 million acres in North Bihar. The principal works

to be undertaken include a barrage, a canal system and embankment on both sides above and below the barrage. During the plan period 56 per cent. of the earthwork was completed along the western embankment and 63 per cent on the eastern embankment, the total length of embankments completed running to about 60 miles. Flood protection works at the Kosi are expected to be completed in 1959. The Kosi project was noted for the successful work undertaken by voluntary organisations like the Bharat Sevak Samaj and by units of the National Cadet Corps.

15. *Nagarjunasagar*: The First Five Year Plan contemplated a project on the Krishna river. After prolonged examination this took the form of the Nagarjunasagar project which was to be a joint scheme between the former Andhra and Hyderabad States. A Control Board for the project was established in June 1955 and the project was formally inaugurated in December 1955, expenditure during the year 1955-56 being of the order of Rs. 1.11 crores. Satisfactory progress was achieved on the construction of coffer dam. The project is intended to provide irrigation of the order of 2 million acres.

16. *Koyna*: The total cost of the project is Rs. 33.22 crores and it will have an installed capacity of 240,000 kW. A Control Board was formed in June 1954 to ensure expeditious execution of the works. The project report has been recast in consultation with the consulting engineers. Preliminary works such as the excavation of the foundations were begun in 1954 and a total expenditure of about Rs. 3 crores was incurred during the plan period.

17. *Rihand*: This project comprises a dam, a power house and appurtenant works costing Rs. 45.26 crores, and will have on completion an installed capacity of 250,000 kW. A Control Board was constituted in March 1954. Excavation work for the foundation of the dam and river diversion works have commenced. A total expenditure of about Rs. 5 crores was incurred by the end of the first plan. The regulated flow from the Rihand Power House will be utilised for irrigation purposes by enlarging the existing Sone Canal System in Bihar.

II. IRRIGATION PROJECTS

18. *Assam*: Assam's irrigation programme included a number of small irrigation schemes, drainage schemes and flood protection schemes. Of the latter, special mention may be made of the navigation, embankment and the drainage projects and the project for the protection of Dibrugarh town which were intended to benefit a total area of 218,000 acres. The additional area brought under irrigation during the plan was 35,400 acres. The total area

which benefited from works undertaken during the first plan was 697,000 acres which included reclamation etc. In the first three years of the plan the total area benefited was 115,000 acres and the balance of 582,000 acres benefited during the last two years of the plan. Against a provision of Rs. 3.37 crores, the total outlay during the plan was Rs. 3.52 crores. Of the 28 flood protection works included in the navigation embankment and drainage programme, 15 were completed by September 1954 and 5 during 1955-56. The construction of a 1500-foot long revetment for the protection of Dibrugarh, was taken up in 1953 and completed in June 1954. This could not withstand the floods of that year, but the 5 stone spurs which were constructed later helped to withstand successfully the floods of 1955-56.

19. *Andhra*: The State of Andhra had a total irrigated area of 3.9 million acres in 1951-52 from tanks and Government canals constructed prior to the first five year plan. Most of this area was situated in the deltas of the Krishna and the Godavari rivers. The irrigation programme adopted in Andhra included 6 major irrigation projects and 17 medium irrigation schemes. Together, besides expanding irrigation in the delta area, these projects were intended to benefit Rayalaseema as well as other scarcity affected districts. The works undertaken or begun during the first plan have a total irrigation potential of about 1.8 million acres, of which by March, 1956 irrigation to the extent of 99,000 acres had been realised. Progress on all the medium irrigation schemes was satisfactory, a total outlay of Rs. 3.4 crores having been incurred during the period of the plan. Thirteen of the medium irrigation schemes had been more or less completed before the end of the plan.

20. The Nagarjunasagar project on the Krishna river, which is expected to irrigate about 2 million acres of land in Andhra and Hyderabad, was begun in December 1955.

21. The six major irrigation schemes undertaken in Andhra during the first plan were the Tungabhadra project, the Krishna Barrage and the Rallapad, the Romperu Drainage, the Upper Pennar and the Bhairavanitippa schemes. The Tungabhadra, which is a multi-purpose project undertaken jointly by the Andhra and the Hyderabad Governments and is intended to irrigate a total area of 6,32,500 acres, reached an advanced stage of construction before the end of the plan. The reservoir and the dam were completed in 1955, but there was a considerable lag in respect of canals and the programme relating to the development of irrigation. Before the end of the plan an area of 75,000 acres had been brought under command for irrigation in Andhra, but the actual irrigation undertaken amounted to 25,000 acres, the excess supplies being used as a temporary

measure for raising a second crop in the Krishna delta areas. During the plan period the total outlay on the Tungabhadra project was Rs. 13.1 crores of which the share of Andhra (including areas transferred to Mysore at the end of 1953) was Rs. 7.26 crores. Schemes of land reclamation and development to speed up the utilisation of the available supplies from the Tungabhadra were introduced in the last year of the plan.

22. The Krishna Barrage scheme was designed to improve and strengthen the existing anicut near Vijayawada. The project will add 1,00,000 acres of irrigation in the Krishna and the Guntur districts. Against an estimated outlay during the plan of Rs. 166 lakhs, Rs. 99 lakhs were spent. On the Rallapad project, Rs. 57.5 lakhs were spent during the plan against a provision of Rs. 46 lakhs. The project will be completed in 1958. The Romperu drainage project, which was begun in 1946, was completed during the plan period at a total expenditure of about Rs. 63 lakhs. The Upper Pennar project, which was begun in 1951 and was one of the principal works undertaken with famine labour in the early years of the plan was completed in 1956 at a total cost of Rs. 1.17 crores. This project is designed to irrigate an area of 6,000 acres. The Bhairavanitippa project was begun in the first year of the plan, but its execution was delayed pending agreement with Mysore. A total expenditure of about Rs. 50 lakhs was incurred on the project which will be completed during the second five year plan.

23. *Bihar*: Before the first five year plan, tanks and Government canals irrigated about 21.47 lakh acres in Bihar. Works included in the first plan were intended to increase the irrigated area by 689,000 acres. By 1955-56 an additional area of 2,65,000 acres had been irrigated and 11.15 lakh acres reclaimed, the total outlay being Rs. 12.52 crores compared to the plan provision of Rs. 12.15 crores. The plan included 10 major and medium irrigation projects, of which one was in the nature of pumping scheme to serve areas affected by drought and 4 involved the construction of tubewells. In 1953-54, as part of the programme for permanent improvements in scarcity affected areas, 43 small irrigation schemes were taken up and it was decided to drop the project for constructing 200 tubewells in South Bihar. During the plan period, the Lower Sakri Valley project, with an irrigated area of 50,000 acres in Patna, Gaya and Monghyr, was completed, as also several small pumping schemes as well as weirs in hilly districts. At the end of the plan the Tribeni Canal, the Potana and Durgawati irrigation schemes and a number of other smaller works were nearing completion. As mentioned earlier, work on the Kosi also commenced during the plan period.

24. *Bombay*: The State of Bombay had before the first plan under irrigation from tanks and Government canals, a total area of 578,000 acres. Its 6 major irrigation projects under the plan, namely, the Kakrapara weir, the first stage of the Mahi Right Bank Canal, the Ghataprabha Left Bank Canal, the Gangapur Dam, the Ranad and the Kolchi weir were expected on completion and full development, to irrigate a total area of 12.77 lakh acres. In addition, towards the end of 1953-54, as part of the programme of permanent improvements in scarcity-affected areas in the State, 25 medium and minor irrigation works, which have a total irrigation potential of 244,000 acres, were approved. Satisfactory progress was made in the construction of most of the projects, the total outlay during the plan period being Rs. 24.25 crores compared to the provision of Rs. 28.56 crores. Works completed included the Ranad tank, the Kolchi weir and the percolation tank at Bori in North Satara District. Works which were in an advanced stage of construction at the end of the plan included the Kakrapara canal system, the Mahi Right Bank Canal, the Ghataprabha Left Bank Canal, the Nasik Left Bank Canal, and the Karol project in the Sabarakantha District. It was estimated that before the end of the plan, 474,000 acres will be brought under irrigation, but the progress made in carrying out the construction programme was not reflected in the actual area brought under irrigation, which amounted in March, 1956 to 43,000 acres only. The reasons given for this large difference between the results anticipated and those actually achieved are:

- (a) lag in the construction of canals in the Gangapur project;
- (b) time taken in the detailed planning of canals, and water courses of the Kakrapara weir scheme;
- (c) underestimation of the time required for redesigning major cross drainage works on large rivers and channels; and
- (d) inadequate demand from cultivators and non-completion of the distributaries and water courses on the Ghataprabha project.

A closer study should be made of the reasons for the delay and effective steps taken to bring the maximum area possible under irrigation.

25. *Madhya Pradesh*: In its first five year plan, the State of Madhya Pradesh, which had a total area of 17.34 lakh acres under irrigation, took up six new major works costing about Rs. 6.8 crores with a total irrigation potential of 192,000 acres and 8 smaller schemes in the programme of permanent improvements for scarcity affected areas. One of the major schemes, the Aree Tank project, with a total irrigation of 10,000 acres was completed in 1954.

Other projects were still in progress at the end of the plan. Against a target of 114,000 acres which had to be irrigated by March 1956, only 10,000 acres had been actually brought under irrigation. The programme of works in the scarcity affected areas also made slow progress although the expenditure on all these irrigation works during the plan was Rs. 2.62 crores against a total plan provision of Rs. 3.34 crores. Several of the projects started later than had been anticipated, mainly because the Irrigation Department of the State was not sufficiently organised and was lacking in experienced technical personnel and on account of shortage of construction equipment.

26. *Madras*: When the first five year plan was drawn up, Madras was a composite State including the Andhra area which became a new State in October, 1953. In the residuary Madras State the total irrigated area in 1951-52 was 34.66 lakh acres. The plan provided for the completion of a number of projects which had been begun earlier and for undertaking a few new projects. These included the Lower Bhawani, the Malampuzha, the Mettur Canal, the Manimuthar, the Cauvery Delta Drainage, the Araniar, the Walayar and the Mangalam Projects. At the close of 1953, the Amaravati, Vaigai, Sathanur and Krishnagiri projects were also added. The total irrigation potential of the projects undertaken in Madras was 396,000 acres. The provision made for the five year period was Rs. 20.18 crores, the expenditure incurred during the plan period being Rs. 20.60 crores. Among the projects completed were the Lower Bhawani, the Malampuzha, the Mettur Canal and the Cauvery Delta. Against an irrigation target of 435,000 acres, the area actually brought under irrigation from new schemes during 1955-56 was 221,000 acres. The water resources of Madras State have been largely utilised and further development now calls for joint planning in the use of resources between Madras, Andhra, Mysore, and Travancore-Cochin (Kerala).

27. *Orissa*: Apart from the Hirakud project, the irrigation programme of Orissa State consisted mainly of small irrigation schemes. The area under irrigation in Orissa before the plan was 12.75 lakh acres on tanks and Government canals and it was anticipated that by the end of March 1956 Hirakud would provide additional irrigation for 261,000 acres and other projects for 480,000 acres. As stated earlier, irrigation from the Hirakud commenced in September, 1956. Other schemes completed during the plan period have a total irrigation potential of 400,000 acres.

28. *Punjab*: Irrigated area in the Punjab increased during the first plan from about 3.9 million to about 5.1 million acres. In addition to the Bhakra-Nangal and Harike Projects, the State's programme included 8 irrigation schemes. Of these, the Dera Baba

Nanak and Aliwal tubewell schemes were dropped and two others introduced, namely, the remodelling of the Western Jamuna canal and the Madhopur-Beas link. Apart from the Bhakra Nangal project, the total outlay on irrigation during the plan period was Rs. 3.72 crores against a plan provision of Rs. 4.38 crores and the additional area irrigated was 466,000 acres compared to the target of 666,000 acres. The Jagadhari tubewell scheme for augmenting supplies for the Western Jamuna canal and the Radaur and Munak tubewell schemes were completed and work on the remodelling of the Shah Nahr, extension of the Kasur branch and the Upper Bari Doab canal, extensions of channels under the Western Jamuna canal and the Kiran Nallah was more or less completed before the end of the plan. Most of the works connected with the construction of the Madhopur Beas link were also completed and rapid progress was being made on the construction of the barrage.

29. *Uttar Pradesh*: At the commencement of the first plan, Uttar Pradesh had 7.8 million acres of land under irrigation from Government canals and tubewells. Works undertaken during the first plan were expected to increase the irrigated area by 1.9 million acres on full development. The irrigation programme for the first five year plan included 36 schemes, including 16 which were already in progress, when the Plan was formulated. The total outlay on the programme for irrigation under the plan was to be about Rs. 34 crores; the expenditure incurred was Rs. 28.41 crores. Work on 8 projects was completed by the third year of the plan. In the last year of the plan the Arjun and Sirsi dams and the Tons and Banganga canals were ready for irrigation. At the end of the plan period work on other projects such as the Chandraprabha, Matatila and Naugarh dams was on the point of completion and the greater part of the work on the first stage of the Sardasagar and the Tanda and Dohrighat schemes had been carried out, and the remodelling of the Ganga, Eastern Yamuna and Agra canals had also made good progress. 2118 tubewells had been constructed, and 1876 were supplied with energy. The target for additional irrigation during the period of the plan was 16.74 lakh acres. Against this, the additional area reported to have actually come under irrigation from major works upto the end of 1956 was about 7,40,000 acres. It has been stated that this shortfall was due mainly to heavy floods and to the slow development of irrigation. In view of the extent of the shortfall a careful assessment should be made of the reasons for it and effective steps taken to bring the maximum area possible under irrigation.

30. *West Bengal*: In West Bengal the outlay on irrigation during the first plan was Rs. 14.2 crores against a provision of Rs. 14.9 crores. The area irrigated before the first plan was 13.01

lakh acres from tanks and Government canals. The works included in the irrigation plan of the State were intended on completion and full development to increase the irrigated area by 21.44 lakh acres. Eighteen out of 20 irrigation schemes included in the plan were more or less completed by March 1956. These included the Mayurakshi project and the Suvankar-danra, Sonarpur-Arapunch-Malta, Bagjola-Ghunni-Jantragachi irrigation schemes. A number of these schemes had been begun shortly before the plan. On three of the projects, progress was hampered on account of difficulties connected with land acquisition, strikes, etc. The total potential for irrigation development during the plan period was of the order of 350,000 acres, the actual area irrigated being 223,000 acres. As stated earlier, the Durgapur Barrage was opened for irrigation in August 1955, and although it made irrigation available for 100,000 acres, there was actually no irrigation.

31. *Hyderabad*: The Hyderabad State had a number of major and medium schemes for irrigation which commenced before the plan. These included the Tungabhadra (undertaken jointly with Andhra) the Rajolibunda and the first phase of the Godavari project. At the end of 1953, additional medium irrigation schemes were approved for areas affected by scarcity. Against a total plan outlay of Rs. 27.8 crores, the expenditure incurred was Rs. 21.64 crores. The reservoir at the Tungabhadra project which could irrigate about 7 lakh acres, was completed in 1955; but only 32 miles of the main canal from the dam within the Hyderabad State were completed. Irrigation supplies were, however, available from the partial storage during 1953.

In view of the delay in the utilisation of irrigation waters stored in the Tungabhadra reservoir, the Planning Commission arranged in 1954 for three teams of officers (one for each of the former States of Mysore, Hyderabad and Andhra) to study the problem and recommend measures for speeding up the utilization of water. The teams reported that in the areas benefiting from the Tungabhadra project there was paucity of labour, especially on the Hyderabad side. In order to bring in fresh settlers from outside, land should be obtained in all these States by levying betterment fees in kind. As reclamation of land in the area was making slow progress it was thought desirable to supplement manual labour by the use of machinery. Demonstration plots should be established on cultivators' fields so that local farmers could become better acquainted with methods of irrigated cultivation. Also, steps should be taken to provide credit facilities on a larger scale. In 1955-56 loans amounting to Rs. 129 lakhs were sanctioned in Hyderabad, Andhra and Mysore with a view to facilitating action on these recommendations. At the end of the plan water had been let out for irrigation

for 49,000 acres but the actual area irrigated was 10,000 acres. The Governments concerned should again investigate the reasons for the delay in utilising water for irrigation and take steps to expedite utilisation.

Construction work on the first phase of the Godavari project had reached an advanced stage and was expected to be completed by June 1957. Pending a settlement with the Andhra Government, work on the Rajolibanda project was held up, although there was greater progress on the Hyderabad side. Khasapur, Koil-sagar, Bhimanpalli, Kadam and Bendusara Irrigation schemes were more or less complete and irrigation supplies were available. Compared to the original plan target of 306,600 acres, at the end of March 1956 the additional area irrigated from the new works was 100,000 acres.

32. *Madhya Bharat*: In the Madhya Bharat State, irrigation had been chiefly developed in the area of the former Gwalior State. In the Indore area, with its black cotton soil and copious rainfall, artificial irrigation was less important. The general aim was, therefore, to improve, maintain and restore the existing sources of irrigation such as reservoirs, tanks and channels and supplement them either with new works or with measures for the development of less advanced areas. The total outlay on irrigation was Rs. 2.26 crores against a plan provision of Rs. 2.9 crores and the additional area irrigated before the end of the plan was 78,000 acres against the initial target of 83,000 acres. Generally, construction work was hampered for want of adequate organisation and technical personnel. The Mola dam project, which was intended to irrigate 7,000 acres of land in Guna district, was expected to be completed during 1956-57. The original Borad irrigation scheme was split up for technical reasons into four smaller tanks, two of which were taken in hand. The majority of the medium irrigation schemes included in the plan were completed. The smaller irrigation schemes included in the plan were completed, according to schedule.

33. *Mysore*: Mysore's irrigation programme for the first five year plan consisted of 32 medium and small projects, of which 17 were in progress when the plan was formulated. The plan provided Rs. 7.16 crores for 6 schemes, but about 70 per cent of the expenditure was devoted to three projects, the Bhadra, the Tunga and the Nugu on which work had been in progress over several years. In the course of the plan period, an attempt was made to expedite construction on the Tunga and the Nugu projects and to rephase the Bhadra project so that it could yield some definite benefits without excessive delay. Although the total outlay on irrigation schemes in the State (other than the Tungabhadra) was Rs. 10.17 crores, the

additional area irrigated during the plan period on account of these schemes was only 28,000 acres. Progress on the Bhadra Project has been behind schedule; the Tunga Anicut was completed in 1953, but on account of the lag in the construction of canal system the total irrigation potential developed was only 10,000 acres. On the Nugu project the greater portion of the work was completed. Under the Tungabhadra low level canal project, 12,000 acres were brought under cultivation in Mysore. So far, no irrigation has become available from the Bhadra and Ambiligola projects.

34. *Rajasthan*: In the course of the plan, in Rajasthan, the area irrigated by tanks and government canals increased from 898,000 to 11,46,000 acres. The irrigation programme was augmented in 1953 when 21 new small irrigation schemes were approved under the programme of permanent improvement of scarcity areas. Against a total provision of Rs. 6.93 crores, the outlay incurred during the plan period was Rs. 5.95 crores. In addition to 142,000 acres irrigated from the Bhakra Nangal project, irrigation to the extent of 106,000 acres was secured upon the completion of Jawai, Juggar, Bhula, Bankli, Homewas and Mosal and other projects. Work on a number of projects was nearing completion at the end of the plan, as for instance, the Gudeh, Kalisil, Girinanda, Ummedsagar, Meja and Parvati.

35. *Saurashtra*: Saurashtra had an irrigation programme involving a total outlay of Rs. 7.8 crores and promising irrigation of 108,000 acres. The expenditure on irrigation during the plan was Rs. 6.64 crores. When the State was integrated, the area receiving canal irrigation amounted to 30,000 acres. By the end of 1955-56, the total irrigation potential was expected to rise to 129,700 acres and, when other schemes which were in advanced stages of construction were completed, to 201,975 acres. The area actually receiving irrigation in 1955-56 was 56,000 acres. Of the 15 irrigation projects included in the programme of the State 5 were completed by 1954-55, namely the Ranghola, the Brahmani, the Surajwadi, the Ghee and the Bhundad and 4 in 1955-56, namely, the Moj, the Puna, the Malan and the Sasoi. An extensive programme of works involving a total outlay of Rs. 2.5 crores was approved in 1953-54 by way of permanent improvements, in scarcity affected areas. It included 5 irrigation schemes, namely the Bhogavo, the Machu, the Gondli, the Munjiasar and the Shetrunji as well as schemes relating to contour-bunding, construction of reclamation bunds and intensification of well-sinking activities. The programme as a whole made satisfactory progress, the Machhu irrigation scheme in particular, reaching an advanced stage.

36. *Travancore-Cochin*: The irrigation programme of the State of Travancore-Cochin included 6 major irrigation projects, of which four, namely, the Peechi, the Chalakudy, the Perinchani and the Waddakanchery were in progress when the plan was formulated. Together, these 6 projects were expected to irrigate 109,800 acres of land, provide protection from floods to 121,000 acres and stabilise existing irrigation over an area of 56,000 acres. The total outlay during the plan period was Rs. 5.12 crores compared to a provision of Rs. 5.78 crores. As against an initial irrigation target of 17,000 acres, the additional area irrigated from these schemes amounted to 46,000 acres. The completion of the Perinchani reservoir in the Kodayar extension system will ensure stable irrigation for 56,000 acres of land already irrigated. The Peechi, Chalakudy and Kut-tanad projects were more or less completed by the end of the plan and progress on the Waddakanchery and Neyyar projects was satisfactory.

37. *Jammu & Kashmir*: During the first five year plan the State of Jammu & Kashmir carried out 14 irrigation schemes with a total potential of 85,000 acres. The outlay during the plan period was Rs. 2.18 crores against the initial provision of Rs. 3.4 crores. The programme included a number of projects such as the Sindh Valley scheme, the remodelling of the Pratap canal, the Vishow canal, the Ferozepur nallah, the Kharbatang canal, the extension of Zamugur canal and the remodelling of the Lar and Dabo kuhls and Sindh river. All the minor irrigation schemes in the State's programme were completed and construction works on other projects were in progress. By March 1956, an additional area of 20,000 acres is estimated to have come under irrigation.

38. *Pepsu*: In addition to the Bhakra-Nangal, Sirhind feeder and Madhopur Beas link projects which were undertaken jointly with the Punjab, the outlay on irrigation in Pepsu during the plan was Rs. 69 lakhs as compared to the provision of Rs. 72.6 lakhs. From the major schemes mentioned above the additional irrigation realised during the plan was 240,000 acres, out of which 77,000 acres were irrigated under Bhakra-Nangal system in Pepsu. Among the principal medium irrigation schemes taken up during the plan were the Narnaul and Dacri schemes in the Mohinder-garh district and 480 tubewells in the Dhuri area of which 155 were provided with energy during the first five year plan.

39. *Other States*: Before the plan, Himachal Pradesh had a total area of about one lakh acres under irrigation mainly from hill streams known as kuhls. During the plan 87 kuhls were constructed at a total cost of about Rs. 39 lakhs and the additional area irrigated was 13,000 acres. On account of the difficult terrain and inadequate staff and communications, progress was slow.

40. In Ajmer, 8 irrigation schemes were taken up during the plan. Of these, at the end of the plan, 6 were completed and 2 were in progress, the area to be irrigated upon completion and full development being 9,000 acres. The total expenditure on the irrigation programme during the plan period was Rs. 16.5 lakhs.

41. In Kutch, the total outlay on irrigation during the plan was about Rs. 85 lakhs against a provision of Rs. 91 lakhs. Four irrigation schemes were completed, namely, the Sanandre, the Kankevati, the Kail and the Gajod. When these projects are fully developed, they will have an irrigation potential of 25,353 acres. The additional area actually brought under irrigation during the plan was 2,000 acres.

42. In Delhi an outlay of Rs. 5 lakhs was incurred on the re-modelling of the Western Jamuna Canal.

III. POWER PROJECTS

43. *Andhra*: Andhra had a large power development programme during the first five year plan, the total outlay being Rs. 25.8 crores. During the plan period the installed power capacity in the State increased from 21,000 kW to 62,000 kW and the number of towns and villages electrified from 205 to 681, as many as 188 being benefited during 1955-56. The principal power projects in the State were the Machkund hydro-electric scheme serving Andhra and Orissa and the Tungabhadra hydro-electric project serving Andhra, Hyderabad and Mysore. On Machkund project, which is designed to generate 102,000 kW of power, two units of 17,000 kW each were commissioned by March 1956, and the third unit of 17,000 kW was commissioned in June 1956, Andhra's share of the power capacity installed is 23,800 kW. On the Tungabhadra project, at the end of the plan, work on the erection of the generating sets at the Dam Power House was in progress.

44. *Assam*: Power programmes in Assam were slow to commence, largely for lack of experienced technical personnel and of transport facilities. The Umtru hydro-electric scheme, which has an installed capacity of 7,500 kW and is the first important power scheme in Assam, was expected to be completed by 1955-56, but will come into operation in April 1957. In the last year of the plan work also began on the electrification of 14 small towns and rural areas with diesel stations. The total outlay on power schemes during the plan was about Rs. 1.37 crores of which Rs. 96 lakhs were spent during 1955-56.

45. *Bihar*: The power programme in Bihar made considerable progress during the last two years of the plan. The total outlay on power was Rs. 9.49 crores, of which Rs. 4.1 crores was spent during 1955-56. In the course of the plan, 3530 miles of H.T. and

L.T. lines were constructed in Bihar for distribution of power from the D.V.C. system. Of these, 1370 miles of transmission and distribution lines were completed in 1955-56. The completion of a number of pilot diesel stations added 8,234 kW of installed capacity during the plan. In all, about 360 towns and villages in Bihar were electrified during the period 1951 to 1956.

46. *Bombay*: In Bombay the total installed capacity increased during the plan from 416,000 kW to 623,000 kW, but the growing requirements of the State called for development on a bigger scale. In the Bombay-Maharashtra area 78,000 kW were added at the Chola power station, 22,000 kW at Tata's power station at Ehira and 4,800 kW at the Bombay State Electricity Board's hydro-station at Randhanagri. At the end of 1956, Tata's first thermal unit at Trombay was commissioned with a capacity of 50,000 kW. By 1955-56, a total installed capacity of 22,500 kW was built up at the Utran steam station under the South Gujerat Scheme and Ahmedabad Electric Supply Company completed its programme of adding 60,000 kW of generating capacity at Ahmedabad. Work on the extension of power from Mysore to the Bombay-Karnatak region was also completed during 1955-56. In addition to the bigger towns, about 185 small towns and villages with a population of less than 10,000 were electrified during the plan period. The total outlay on Bombay State's power programme during the plan was Rs. 10.98 crores against a provision of about Rs. 13.5 crores.

47. *Madhya Pradesh*: The State made good progress in power development during the first plan. The total installed generating capacity increased from 28,000 kW to 84,000 kW including 4,000 kW installed by a private licensee at Jabalpur. In the course of the plan about 235 small towns and villages were electrified of which 115 villages were electrified in 1955-56. The total outlay on power projects during the plan was Rs. 7.94 crores against the plan provision of Rs. 3.55 crores. A considerable part of the power programme had been commenced shortly after the war so that the increase in power capacity was achieved in the early years of the plan. Thus a 30,000 kW station was commissioned in 1951-52 at Khaparkheda, a 4,000 kW station at Raipur in 1951 and a 17,000 kW station at Chandni in 1953-54. In addition, during the plan 22 pilot diesel stations serving isolated areas were installed with a total capacity of about 3,000 kW. At the Ballarshah thermal power station, three units of 7,750 kW were expected to be installed by 1955-56, but only one unit was installed and two were due to be commissioned in the following year.

48. *Madras*: During the first five year plan the total installed capacity in Madras State rose from 146,000 kW to 256,000 kW.

However, on account of the effects of drought on the supply of power from hydro-electric stations and the rapidly growing demand in the Madras area, the State experienced periods of intense shortage. As new power projects had been commenced in the Madras State in the immediate post-war period, a number of important schemes were completed in the early years of the plan notably the Moyar Hydro-electric scheme (36,000 kW) the first and the second stages of the Madras thermal station (30,000 kW) and extensions to the Papanasam system (17,000 kW) and the Pykara power station (28,000 kW). The construction of the 105,000 kW Periyar hydro-electric project and the addition of 30,000 kW at the Madras thermal station commenced towards the end of 1954 and rapid progress was made during the following year. The lignite project in the South Arcot district, which provides for a 200,000 kW thermal station, also commenced in 1955. A large programme for transmission and distribution lines was undertaken. During the plan, 1,930 towns and villages were electrified of which 875 villages benefited during 1955-56. The State incurred a total outlay of Rs. 30.7 crores during the plan period.

49. *Orissa*: In Orissa apart from the Machkund project, installed capacity increased during the plan from 4,620 kW to 10,853 kW excluding Machkund. With the completion of one generating set at the Hirakud project, installed capacity of 24,000 kW was available in December, 1956. The Machkund project provided 10,000 kW to Orissa but on account of the lag in the construction of transmission and distribution lines, this supply was not fully utilised during the plan. Work on two diesel stations with a total capacity of 2,700 kW commenced in 1955-56 at Rairangpur and Rajagangpur. During the plan 48 small towns and villages received electricity for the first time. The total expenditure on power projects was Rs. 4.75 crores against a plan provision of Rs. 6.15 crores.

50. *Punjab*: In the Punjab, the total installed capacity increased from 61,000 kW to 119,000 kW during the first plan period and 250 small towns and villages received electricity for the first time. In all 220 miles of 132/220 kV lines, 276 miles of 132 kV lines, 129 miles of 66 kV lines and associated sub-stations were constructed for distributing power from Nangal and Kotla power stations of the Bhakra system. In addition to expenditure on power under the Bhakra Nangal Project, the State spent Rs. 6.24 crores on power as against the plan provision of Rs. 5.62 crores.

51. *Uttar Pradesh*: For its size and requirements Uttar Pradesh did not have an adequate power development programme. During the plan, installed capacity increased from 184,000 kW to 290,000 kW

and 130 towns and villages were electrified. The principal power projects completed during the plan were a 20,400 kW station at Pathri, two units of 13,800 kW each at the Khatima hydro-electric station (with a third to follow in 1956-57), a 15,000 kW unit at Kanpur and units adding to about 33,000 kW at Mohammadpur, Gorakhpur and other places. The total outlay during the plan period was Rs. 16.9 crores compared to the plan provision of Rs. 23.4 crores.

52. *West Bengal*: The principal new sources of power supply in West Bengal were the D.V.C. with its new installed capacity of 154,000 kW and the Calcutta Electric Supply Company which completed its project for the addition of 30,000 kW in the early years of the plan. Other works undertaken included a 4,000 kW hydro-electric station at Mayurakshi, extension of H.T. and L.T. lines for the distribution of power from the D.V.C. system, the erection of 11 pilot diesel stations and extension of electricity to 60 towns and villages. The total outlay on power projects of the West Bengal Government was Rs. 2.57 crores against a plan provision of Rs. 2.59 crores.

53. *Hyderabad*: In Hyderabad, against an anticipated addition in installed capacity of 53,000 kW the increase secured during the plan was only 17,000 kW, from 21,000 kW to 38,000 kW. The lag was due to the delay in the completion of the 37,500 kW Ramagundam thermal station which was originally expected to be commissioned by 1953-54. This project was expected to be completed by March, 1957. Two units of 5,000 kW were added at Nizamsagar during 1955-56 and satisfactory progress was made on the installation of the 18,000 kW hydro-electric station, on the Hyderabad side of the Tungabhadra project.

54. *Madhya Bharat*: In Madhya Bharat generating capacity increased during the plan from 14,000 kW to about 32,000 kW. This included an addition of 13,000 kW at Indore and of 2,500 kW at Gwalior. Transmission lines from Indore to Ujjain were also constructed. The total outlay was Rs. 2.66 crores against a plan provision of Rs. 2.87 crores.

55. *Mysore*: Mysore State spent about Rs. 10.5 crores on power projects during the plan. Due to the completion of the 72,000 kW Mahatma Gandhi Scheme at Jog which was begun as far back as 1940, the total installed capacity in the State rose during the plan from 107,000 kW to 179,000 kW. The available power was, however, found insufficient for meeting the increasing demand. The plan had provided for the construction of the 34,000 kW Shimsha extension project but this was deferred in favour of the Sharavathi hydro-electric scheme which has since been included in the Second Five

Year Plan. The electrification of small towns and rural areas had made marked progress before the first five year plan. This continued and facilitated the expansion of electrified lift irrigation.

56. *Rajasthan*: In 1953 the need for renovating power stations at several of the former State capitals was felt to be urgent and the programme was augmented. On account of delays in the procurement of material and equipment and the lack of experienced technical personnel, however, progress was slow and during the plan installed capacity increased only from 24,000 kW to 39,000 kW as compared to the target of 39,000 kW of additional capacity.

57. *Travancore-Cochin*: Travancore-Cochin had long been an area of acute power shortage and although during the plan installed capacity increased from 35,000 kW to 92,000 kW, the growing requirements of the State justified a larger effort. At the end of the plan, the 24,000 kW station at Poringalkuthu was near completion and work at the 45,000 kW hydro-electric station at Neriamangalam which had been approved in 1954 was making satisfactory progress. The programme for the electrification of small towns and rural areas was also actively pursued.

58. *Jammu and Kashmir*: The Sind hydro-electric project which provided for a station of 6,000 kW and the construction of the transmission lines between Jammu and Anantnag was completed in 1955-56. The total outlay on power schemes in the State during the plan was about Rs. 3 crores.

59. *Delhi*: To meet the increasing demand for power in the Delhi area, an addition of 25,000 kW was made in installed capacity at the Delhi power station. Delhi also received about 10,000 kW of power from Nangal at the end of the plan.

60. *Other States*: Besides the States whose programmes have been briefly described above, power programmes were also undertaken in varying degree in the remaining States. In Pepsu, attention was given to the construction of transmission lines for the distribution of power from the Bhakra Nangal system. Saurashtra added 6,700 kW to its installed capacity in addition to the 6,000 kW extension at Shahpur thermal station which was expected to be commissioned by March 1957. In Himachal Pradesh 50 miles of transmission lines were completed during the last year of the plan. A number of schemes was also carried out in Coorg, Kutch, Tripura, Vindhya Pradesh and Pondicherry.

61. *Power Expansion Facilities Programme to Relieve Unemployment*: In 1953-54 attention was drawn to the fact that in several

growing towns shortage of power impeded the maintenance of employment and the development of industry. The State Governments were requested to review the power position in different areas with special reference to:—

- (a) towns with an existing supply of electricity which were small or medium sized (say, with a population of 10,000 to 50,000) which have been growing fairly rapidly and in which employment opportunities could be considerably expanded if additional power could be made available and/or existing worn out plants could be replaced;
- (b) towns which did not have electricity at present and were not expected during the next four or five years to be included in any grid scheme in which, on account of their situation, communications, local skills or new economic developments in neighbouring rural areas, employment could be increased fairly rapidly if small power plants could be provided;
- (c) suburbs of large towns, especially with considerable refugee population without sufficient work opportunities; and
- (d) community project areas in which, on account of existing skills or local resources or new development programmes, employment in small industries could be expanded and in which there was adequate scope for utilizing power in rural areas, e.g., in irrigation pumping.

Schemes costing about Rs. 20 crores were taken up in the States under this special programme. The intention was to complete all these schemes before the end of the first plan period. Owing to difficulties in the procurement of materials, the progress of works under this programme was slow. In the last two years of the plan, the expenditure incurred on these works was about Rs. 8.3 crores. The works are being continued during the second plan and it is expected that all of them would be completed during 1957-58.

62. *Load Surveys:* Assessment of prospective power load has to be a continuous process so that every region in the country is covered after every three or four years. Until recently regional load surveys were carried out for particular projects. A phased programme of load surveys on a national basis and spread over a period of four years has now been drawn up by the Central Water and Power Commission. For convenience, the country has been divided into four regions with headquarters at Meerut, Bombay, Calcutta and Bangalore. The work of load survey has been divided into two phases. The first phase aims at giving an overall load

picture for each State within the shortest possible period to enable detailed planning during the second plan. Data required for the first phase are mostly based on information readily available from the States and are supplemented by some sample load surveys. Later more detailed field surveys are to be undertaken. Survey work under the first phase was started in 1955 and has been completed in almost all the States. Preliminary load survey reports have been published for Travancore-Cochin, Uttar Pradesh, West Bengal, Saurashtra, Tripura, Manipur, Assam, Bihar, Madhya Bharat, Punjab, Himachal Pradesh, Delhi and Rajasthan.

IV. FLOOD CONTROL

63. When the first five year plan was drawn up schemes directed towards flood control were dealt with broadly as part of the irrigation programme. The floods of 1954 and 1955, which caused damage in several States, led to the building up of organisations for undertaking flood control programmes. These included a Flood Control Wing in the Central Water and Power Commission composed of two Chief Engineers, the establishment of a Central Flood Control Board, Flood Control Boards in 11 States and 4 River Commissions for the Brahmaputra, the Ganges and the rivers in Central and Northern India. Flood Control problems began to receive intensive study, and co-operation was secured from Nepal, Bhutan and Sikkim for carrying out investigations and collecting data bearing on flood control works. During the last two years of the first plan the total expenditure on flood control works which were specially approved was of the order of Rs. 10.8 crores. Of this, Rs. 2.9 crores were sent in Assam, Rs. 1.62 crores in West Bengal, Rs. 2.54 crores in Bihar, Rs. 2.75 crores in Uttar Pradesh and Rs. 49.4 lakhs in Jammu and Kashmir.

64. The first phase of the Dibrugarh town protection scheme in Assam was completed in 1954-55 and at the end of the plan, 85 per cent of the work on the second phase was completed. The spurs erected at Dibrugarh successfully stopped the erosion of the town and facilitated accumulation of a wide silt bank. The works constructed were able to withstand the heavy floods of 1955. Other flood protection works were also undertaken. In Bihar 20 schemes including embankments over a length of 235 miles along the Mahe, Ghagra, Burhi-Gandak rivers and town protection schemes at Chapra, Khagaria, and Sitamarhi were undertaken. An area of about 1,000 square miles was afforded protection during 1955. In Uttar Pradesh, before the end of the plan, the Ghoshalpur, the Hahanala and Mustafabad-Khunti bund schemes were nearly completed. Schemes for raising the level of villages in the flood affected areas in the eastern districts, repairs to the Banaras ghats and

the construction of embankment along the Gandak and the Ganga rivers were also undertaken. In West Bengal protective works were carried out at Jalpaiguri, Cooch Behar, Alipur-Duar, Mathabanga, Silliguri and Phansidewa. In Jammu and Kashmir flood control works undertaken for the protection of Srinagar and the neighbouring rural areas made satisfactory progress. A number of works were also carried out in the Punjab. These included the construction of a flood embankment and of a base bund along the Ravi near Dera-Baba-Nanak, closing of creeks and the construction of flood embankment along the Jamuna river and the canalling of the Nasrula Cho. A number of flood protection schemes were carried out in Orissa following the floods of September, 1955. These included the rebuilding of Dalaighai embankment.

V. PERMANENT IMPROVEMENTS IN SCARCITY AREAS

65. In the middle of 1953-54, it was considered that an effort should be made to provide greater security to scarcity-affected areas. It was, therefore, proposed to set apart about Rs. 40 crores for schemes of permanent improvements in these areas. Most of these schemes were for irrigation, but a few other schemes, as for essential roads and improvements in water supply, were also undertaken. The programme was extended to 14 States. Expenditure in 1953-54 was Rs. 3.64 crores, in 1954-55 Rs. 10.29 crores and in 1955-56 Rs. 14.83 crores, making a total of Rs. 28.76 crores for the plan period. Among the larger irrigation projects included in the programme were the first stage of the Matatila in Uttar Pradesh, the Ghod weir in Bombay, the Vaigai in Madras, the remodelling of the Kurnool-Cuddapah Canal in Andhra and the provision of larger funds for expediting work on the Bhadra and Nugu projects in Mysore.

VI. GENERAL

66. *Project Investigations:* For many irrigation and power projects sponsored by various State Governments for inclusion in the Second Five Year Plan, supporting data were either incomplete or inadequate. In most States, Government organisations have been largely devoted to the construction of projects and adequate investigations could not be made for projects proposed for the Second Plan. This problem had received attention at the time of formulation of the first five year plan.

67. To obviate the difficult situation created by lack of timely investigation of projects, the plan had recommended the appointment of an Advisory Committee on Irrigation and Power Projects to assist the Planning Commission in the study and selection of projects. This Committee was constituted in February 1954, met ten times during the plan period, and examined projects proposed by

States for the Second Plan. Out of a total of 184 irrigation and 180 power schemes, project reports were received only for 63 and 115 schemes respectively. Of these 39 irrigation and 56 power schemes were considered by the Advisory Committee. The receipt of projects in the early stages of the work of the Committee was very slow and many of the projects received were incomplete. On the expiry of its term in February 1956, this Advisory Committee was dissolved and a reconstituted Committee was set up again in July 1956 to continue the work of examination of the irrigation and power projects included in the Second Plan.

68. *Betterment Levy*: The First Five Year Plan laid considerable emphasis on the role of betterment levies in areas benefiting from irrigation projects. It was stated:

"That people in every area should feel that the project included in the Plan is their own—intended for improvement of conditions in their area—and that they should make special sacrifices for getting it completed."

The Plan further suggested that:—

"Large schemes cannot be financed unless this principle is accepted and adequate levies are made towards the capital cost. It is estimated that under a suitable system between one-third and one-fourth of the capital cost of a project can be recouped by betterment levies. The levy of betterment contribution in the form of land from the larger holdings will also be useful."

It was also thought that it would be possible to obtain lands needed for community use, for village forests and grazing, markets, etc., to bring about consolidation of holdings, to find lands for landless labourers and in other ways to effect improvements in the agricultural economy of the villages commanded by the project.

69. The Planning Commission urged on States from time to time to take active steps for the levy of betterment fees and the principle was emphasised by the National Development Council on more than one occasion. In the course of the first plan 12 States passed the necessary legislation. These were Assam, Andhra, Bombay, Madras, Orissa, Punjab, Hyderabad, Mysore, Rajasthan, Pepsu, Saurashtra and Himachal Pradesh. Bills were introduced in Madhya Bharat, Travancore-Cochin and Madhya Pradesh. In West Bengal, Bihar and Coorg, Bills were prepared and in Bhopal and Delhi proposals were still under consideration. In Punjab, Pepsu and Rajasthan, betterment boards were also constituted. However, even in States which passed betterment legislation two or three years before the end of the first plan, no recoveries have been made. The

formulation of detailed rules and criteria have tended to take time. As a result of this, there were practically no collections under betterment fees during the first five year plan.

70. *Labour Co-operatives*: In the plan, much stress was placed on the need to organise public co-operation in implementing irrigation schemes. It was recommended that works on which mainly unskilled labour was employed (like canal systems) should, as a rule, be done by villagers themselves and not through contractors and that, in each village or group of villages the villagers should be organised into co-operatives for this purpose. Progress in this direction has, however, been very limited. Labour co-operatives were formed for the Gangapur, Ghataprabha, Mahi and Kakrapar projects in Bombay and the flood protection works at Dibrugarh and eastern Uttar Pradesh. The work done on the Kosi embankments by the villagers in the area organised for the purpose, was on a large scale.

71. *Inter-State Co-operation and Coordination in Use and Development of Water Resources*: For achieving the maximum benefit, development schemes of neighbouring States have to be closely co-ordinated. To some extent, this has already been achieved during the first plan, for instance, in the allocation of waters of the Krishna and the Godavari rivers, in the distribution of costs between the States concerned with the Bhakra-Nangal project and the construction of the Periyar hydro-electric scheme between Madras and Travancore-Cochin. But occasionally differences have arisen between States regarding the sharing of cost and benefits of inter-State river valley projects. To meet such difficulties, the River Boards Act, 1955, and the Inter-State Water Disputes Act, 1955, have been enacted by Parliament. The first piece of legislation enables the Government of India to constitute boards for different inter-State rivers or river valleys in consultation with the States concerned. These boards are to be entrusted with the work of the preparation of schemes, allocation of costs and benefits and co-ordination of the activities of the State organisations, etc. The second piece of legislation provides for the constitution of tribunals with the necessary authority for the adjudication of disputes between two or more States in respect of river valley projects and their benefits.

(Rs. lakhs)

TOTAL . . .	3202	
<p>5000 lakhs as lump sum additional provision for the various Multipurpose Projects.</p>		

*The allotment of Rs. 22382 lakhs included Rs. 3000 million.

STATEMENT I(A) (b)
Expenditure on New Major Projects

(Rs. lakhs)

Sl. No.	Projects	1951-52 to 1953-54 Actual	1954-55 Actual	1955-56 Revised	Total 1951-56
1	2	3	4	5	6
1.	Koyna				
2.	Rihand	43.41	92.12	147.23	282.76
3.	Kosi	22.98	66.81	386.95	476.74
4.	Nagarjuna Sagar	30.29	63.48	299.02	392.79
5.	Chambal	..	..	111.00	111.00
		105.47	125.83	316.86	548.16
TOTAL		202.15	348.24	1261.06	1811.45

Note:—Figures in column 8 in statement I(A) (a) and in column 6 in statement I(A)(b) above are latest figures of expenditure, while that given in column 8 of Annexure II (Rs. 240.8 crores) is based on Revised Budget Estimates.

STATEMENT I (B)

Progress of expenditure on Irrigation Projects *

(Rs. lakhs)

REVIEW OF THE FIRST FIVE YEAR PLAN

Name of State	Progress of Expenditure						Plan Provision	
							Original	Revised
	1951-52 Actual	1952-53 Actual	1953-54 Actual	1954-55 Actual	1955-56 Revised	1951-56 Total	8	9
I	2	3	4	5	6	7	8	9
Andhra	211.2	243.0	197.4	328.5	491.4	1,471.5	..	1744.3
Assam	0.9	7.7	24.2	95.3	223.4	351.5	200.0	337.2
Bihar	173.4	153.9	77.0	290.9	556.8	1,252.0	973.3	1,215.4
Bombay	268.6	255.6	522.3	598.7	780.2	2,425.4	2,269.0	2,856.3
Madhya Pradesh	10.2	2.5	42.7	93.9	112.9	262.2	308.0	334.5
Madras	411.0	416.0	290.0	377.9	565.3	2,060.2	3,408.0	2,018.5
Orissa	69.5	52.0	33.6	41.7	58.7	255.5	300.0	300.0
Punjab	77.0	84.8	51.8	96.3	61.9	371.8	326.2	438.0
Uttar Pradesh	216.5	525.1	602.6	687.5	779.3	2,811.0	1,912.0	3,402.4
West Bengal	190.1	302.4	321.6	231.4	374.2	1,419.7	1,537.8	1,489.5
TOTAL	1658.4	2043.0	2163.2	2842.1	4004.1	12710.8	11234.3	14136.1

Hyderabad</
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*This statement refers to irrigation projects other than those included in Statements I(A) (a) and (b).

STATEMENT I(C)
Progress of expenditure on Power Projects*

(Rs. in lakhs)

Plan Provision

REVIEW OF THE FIRST FIVE YEAR PLAN

Name of State	Progress of Expenditure					Plan Provision			
	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1955-56 Revised	1951-56 Total	Original	Revised	
	2	3	4	5	6	7	8	9	
I									
Andhra	365.0	332.0	478.0	726.0	676.0	2577.0	..	2531.9	
Assam . . . . .	..	0.3	8.4	31.9	96.1	136.7	83.0	199.6	
Bihar	86.0	150.5	142.9	165.1	410.4	948.9	708.7	979.6	
Bombay	253.0	288.9	223.0	118.0	215.0	1097.9	1043.0	1348.1	
Madhya Pradesh	148.3	82.4	126.2	120.0	317.3	794.2	600.0	854.7	
Madras	432.0	453.0	452.0	584.1	1146.7	3067.8	5024.0	3386.0	
Orissa	58.6	58.6	70.9	120.2	166.4	474.7	391.0	614.6	
Punjab	43.3	51.8	139.0	163.9	226.1	624.1	38.2	561.9	
Uttar Pradesh	225.5	325.8	458.6	387.4	292.4	1689.7	2411.0	2341.8	
West Bengal	25.0	27.7	24.0	22.5	157.4	256.6	75.8	259.3	
Hyderabad	55.6	57.6	59.0	65.4	84.5	322.1	320.6	368.1	

Madhya Bharat	.	.	.	.	.	45.7	57.5	39.8	44.1	79.4	266.5	228.0	287.7
Mysore	.	.	.	.	.	198.7	283.9	250.2	138.3	175.6	1046.7	1268.0	1571.7
Pepsu	.	.	.	.	.	4.5	..	..	..	11.7	16.2	30.6	30.6
Rajasthan	.	.	.	.	.	39.6	18.5	30.7	7.2	23.9	119.9	40.8	367.1
Saurashtra	.	.	.	.	.	14.2	27.0	29.3	36.5	245.0	352.0	212.5	363.2
Travancore-Cochin	.	.	.	.	.	206.2	217.2	262.2	154.9	221.7	1062.2	1035.0	1185.0
Jammu & Kashmir	.	.	.	.	.	36.1	48.0	45.8	60.1	81.2	271.2	74.9	295.1
Ajmer	.	.	.	.	.	..	..	..	..	0.1	0.1	..	..
Bhopal	.	.	.	.	.	1.9	4.8	3.0	3.2	7.6	20.5	27.9	73.9
Coorg	.	.	.	.	.	..	..	..	..	7.4	7.4	35.0	42.4
Delhi	.	.	.	.	.	..	..	..	..	..	..	..	..
Himachal Pradesh	.	.	.	.	.	..	1.5	2.9	2.4	15.3	22.1	13.5	35.4
Kutch	.	.	.	.	.	..	7.1	0.7	1.9	22.1	31.8	23.0	60.5
Manipur	.	.	.	.	.	..	0.6	0.1	0.7	8.3	9.7	12.0	12.0
Tripura	.	.	.	.	.	..	0.3	3.7	4.5	6.6	15.1	7.0	7.0
Vindhya Pradesh	.	.	.	.	.	..	0.2	0.3	8.3	37.7	46.5	50.5	72.5
N.E.F.A.	.	.	.	.	.	..	..	..	..	..	..	..	..
Pondicherry	.	.	.	.	.	..	..	..	1.7	10.1	11.8	..	13.0
TOTAL	.	.	.	.	.	2333.2	2495.2	2850.7	2968.3	4742.0	15289.4	12754.0	17862.7

*This statement refers to power projects other than those included in Statements I(A)(a) and (b).

STATEMENT II(A)

Targets and achievements in respect of Multipurpose and New Major Projects

Project	1951-52		1952-53		1953-54		1954-55		1955-56	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
I	2	3	4	5	6	7	8	9	10	11
<i>Irrigation ('000 Acres)</i>										
Bhakra Nangul . . .	19	19	101	101	138	231	707	499	1361	1181
Harike . . .	..	..	..	..	..	..	..	..	..	..
D.V.C. . . .	..	..	26	5	110	..	135	100	595	..
Utrakud . . .	..	..	..	..	..	..	..	..	261	..
New Major Projects (Koyna, Rihand, Kosi, Chambal and Nagarjunasagar)	..	..	..	..	..	..	..	..	..	..
TOTAL . . .	19	19	127	106	248	231	842	599	2217	1181
<i>Power (Installed capacity in '000 KW)</i>										
Bhakra Nangul . . .	..	..	..	..	..	..	48	..	96	48

D.V.C.]	—	—	52	154	154	154	154	194	154
Hirakud	—	—	—	—	—	—	—	48	..
New Major Projects (Koyna, Rihand, Kosi, Chambal and Nagarjunasagar) . . . . .	..	..	..	..	..	..	..	..	..
TOTAL . . . . .	..	..	52	154	154	202	154	338	202

STATEMENT II(B)

Targets and achievements in respect of State Irrigation Projects*

('000 Acres)

States	1951-52		1952-53		1953-54		1954-55		1955-56	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual
I	2	3	4	5	6	7	8	9	10	11
Andhra . . . . .	..	..	..	..	..	2	..	2	..	99
Assam . . . . .	..	19	30	68	90	73	160	102	218	35
Bihar	77	..	180	146	336	336	502	199	657	265
Bombay	2	1	16	2	140	80	327	120	474	43
Madhya Pradesh	5	5	10	10	21	10	56	9	114	10
Madras . . . . .	..	..	42	7	206	46	324	200	435 (including Andhra)	221
Orissa	124	126	263	182	350	62	419	80	480	115
Punjab	97	223	176	238	363	363	543	446	666	466
Uttar Pradesh	123	285	528	585	832	780	1112	1390	1361	740
West Bengal	173	100	360	..	614	619	817	432	917	223
TOTAL	601	759	1605	1238	2957	2371	4260	2980	5322	2217
Hyderabad . . . . .	..	..	31	21	102	32	211	13	306	100
Madhya Bharat	4	2	19	2	20	29	54	45	83	78
Mysore	5	5	7	8	12	7	17	14	30	28
Pepsu . . . . .	..	..	..	..	..	..	..	120	..	163

	11	2	73	5	129 -	73	179	94	243	106
20 Rajasthan	.	.	.	11	2	20	64	104	108	56
21 Saurashtra	.	.	.	4	2	20	6	32	17	46
22 Travancore-Cochin	10	..	35	14	76	20
Jammu & Kashmir	.	.	.	2	..	8	11	..	..	..
	26	21	158	67	313	210	566	436	863	597
Ajmer	1	..	1
Bhopal
Coorg
Delhi
Himachal Pradesh	25	38	50	20	75	13
Kutch	12	2	31	19	38	2
Manipur
Tripura
Vindhya Pradesh
Andaman & Nicobar Islands
- N.E.F.A..
Pondicherry
TOTAL	5	37	40	81	40	113	16
GRAND TOTAL	627	780	1763	1310	3307	2621	4907	3456**	6298	2830

* The statement refers to irrigation projects other than those included in Statement II(A).

** For 1954-55 the actual area irrigated was reported as 3,456,000 acres. As a result of a more detailed enquiry made later, the figure of area irrigated in the last year of the plan was found to be 2,830,000 acres in addition to 1,181,000 acres shown in Statement IIA, a total of 4,011,000 acres of additional irrigation from major irrigation and multipurpose projects.

STATEMENT II (C)

Statement of Targets and achievements in the States from Schemes in the public sector

(Installed capacity in '000 KW)

Name of State	1951-52		1952-53		1953-54		1954-55		1955-56	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
Andhra . . . . .	..	10	..	11	50	14	52	15	54	41
Assam . . . . .	..	..	..	..	..	..	..	..	6	..
Bihar	1	1	4	2	5	2	9	6	12	8
Bombay	2	2	22	21	68	21	77	76	86	84
Madhya Pradesh	24	20	51	51	73	51	73	52	83	62
Madras	7	7	58	43	110	68	110	110	110	110
Orissa	4	4	7	4	22	5	23	5	26	18
Punjab . . . . .	..	..	..	..	..	..	..	..	..	..
Uttar Pradesh	7	7	26	14	29	14	96	62	111	94
West Bengal . . . . .	..	..	..	..	..	..	..	..	6	1
Hyderabad	53	..	53	5	53	15
Madhya Bharat	1	..	4	3	14	4	15	7	19	13
Mysore	36	72	72	72	72	72	72	72

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CHAPTER IX

INDUSTRY AND MINERALS

A. INDUSTRIAL DEVELOPMENT DURING THE FIRST FIVE YEAR PLAN

THE First Five Year Plan described India's industrial structure as it emerged from the second world war in the following terms:

"The major emphasis in industrial development in India has been on consumer goods industries, while the development of basic capital goods industries has lagged behind. The output of consumer goods industries such as cotton textiles, sugar, soap, matches and salt may be said to be on the whole sufficient to meet the existing low level of demand in the country in the present stage of economic development. In the case of capital goods industries and industries manufacturing intermediate products, the available capacity in the country is in most cases inadequate even for present requirements. The production of iron and steel in the country is hardly 50 per cent of the existing volume of demand, and it is evident that in planning the development of a basic industry like iron and steel, account has to be taken not only of immediate requirements but also of the needs of the country over a fairly long period. A high rate of industrial advance cannot be achieved without increasing substantially the production of iron and steel and of aluminium, ferro-alloys, caustic soda and soda ash, fertilisers and petroleum products, for all of which demand at present is much in excess of domestic supply. In respect of the manufacture of plant and machinery required by various industries, only a small beginning has so far been made with the textile machinery industry. The large developments in power generation now under way have to depend on generating equipment from abroad. In the manufacture of synthetic drugs and antibiotics and of dyestuffs and organic chemicals, only small beginnings have been made."

In the light of this analysis, it was agreed that the objective of industrial planning should be to make good the deficiencies described above as far as possible and to initiate developments which would become the basis for a rapid expansion of the industrial sector. It

was emphasised that the distinction between the public and the private sector related more to the mode of operation than to the ultimate objective; that private enterprise had an important part to play in developing the economy and that following the Industrial Policy Resolution of 1948, it would be best for the public sector to develop industries for which private enterprise was unable to put up the resources required and run the risks involved.

2. The general order of priorities in the industrial field approved for the period of the first five year plan was as follows:

- (1) Fuller utilisation of existing capacity in producer goods industries like jute and plywood and consumer goods industries like cotton textiles, sugar, soap, vanaspati, paints and varnishes,
- (2) Expansion of capacity in capital and producer goods industries like iron and steel, aluminium, cement, fertilisers, heavy chemicals, machine tools, etc.,
- (3) Completion of industrial units on which a part of the capital expenditure has already been incurred, and
- (4) Establishment of new plants which would lend strength to the industrial structure by rectifying as far as resources permit the existing lacunae and drawbacks, e.g., manufacture of sulphur from gypsum, chemical pulp for rayon, etc.

To facilitate the implementation of the industrial policy and of the programmes drawn up for individual industries, the Industries Development and Regulation Act was passed in 1952. One of its main provisions was for setting up Development Councils which could provide a machinery working within each industry and helping to bring about steady improvement in standards of productivity, quality of service and management. The plan provided for investment in the public sector amounting to Rs. 94 crores which was in addition to a lump sum provision of Rs. 50 crores for the development of basic industries and transport. In the private sector, the plan envisaged a total capital investment of Rs. 233 crores, in addition to an estimated expenditure of Rs. 150 crores on replacements and modernisation.

3. The industrial programmes for the first five year plan were set out in detail in the volume on "Programmes of Industrial Development, 1951-56." Programmes for the second five year plan have also been described in recent publication on "Programmes of Industrial Development, 1956-61." (1956). For each industry these studies provide a fairly detailed account of progress achieved during the preceding five years. The annual progress reports on the First Five

Year Plan also furnished information regarding progress made during each year. In this chapter, therefore, it will be sufficient to touch upon salient features of the industrial development which has taken place during the period of the first five year plan, detailed comment being limited as far as possible to developments during the year 1955-56.

4. Taking the period of the first plan as a whole the total fixed investment, both public and private, in manufacturing industries amounted to Rs. 293 crores of which private investment amounted to Rs. 233 crores. The production of capital goods increased by about 70 per cent. The production of intermediate goods, mainly industrial raw materials, increased by about 34 per cent. Similarly the production of consumer goods increased by 34 per cent. Taking into consideration the varying degree of importance assigned to these three groups of industries in the index of industrial production (Capital goods: 7.46; intermediate goods: 43.81; Consumer goods: 48.73) the overall increase in industrial production amounted to 38 per cent.

5. While allowance has to be made for the fact that the levels of production in several industries before the first five year plan were relatively low, the following statement of percentage increases achieved in a number of industries indicates the range over which advances have been made during the first five year plan.

	Percentage increase 1950-51 to 1955-56
<i>A. Capital goods—</i>	
Diesel engines	87
Machine tools	133
Wagons	100
Complete rings, spinning frames	230
Grinding wheels	134
Automobiles	53
Railway locomotives	650
<i>B. Intermediate goods—</i>	
Cotton Yarn	39
Jute manufactures	28
Ply wood	109
Sulphuric acid	65

	Percentage increase 1950-51 to 1955-56
Caustic soda	211
Soda ash	80
Rayon Filament	187
Pig iron	14
Finished Steel	30
Aluminium	99
Cement	71
<i>C. Consumer goods--</i>	
Cotton cloth	37
Rubber footwear	95
Soap	37
Vanaspali	80
Enamelware	185
Bicycles	408
Paper	64
Sugar	60

In the private sector, investment targets in the Plan were fulfilled and, through the more intensive utilisation of existing capacity, production was stepped up along lines broadly envisaged in the Plan. In some of the producer goods industries, however, progress in the establishment of additional capacity fell short of anticipations in the plan. This was the position, for instance, in iron and steel, aluminium and nitrogenous fertilizers. Satisfactory arrangements were, however, made during the last two years of the plan for making a commencement in several major projects in the public and private sectors which could not be begun earlier. In the construction of industrial plant and machinery and in the production of capital goods, valuable experience was obtained which would doubtless facilitate progress during the Second Five Year Plan.

6. The main facts regarding the development of industry during the first five year plan are set out in the following statements appended to this chapter:

Table 1—Production and capacity in selected industries in 1950-51 and 1955-56.

Table 2—Industrial development in the public sector.

Table 3—Industrial production in the private sector.

Table 4—Investment in the public sector.

Table 5—Progress of investment in the private sector.

Table 6—Distribution of investment in the private sector.

Table 7—Progress of Industrial production in the private sector in 1955-56.

Table 8—Volume and value of Mineral Production during the First Five Year Plan.

B. INDUSTRIAL DEVELOPMENT IN 1955-56

7. Both in respect of production and new investment satisfactory progress was made during 1955-56. Industrial production rose in 1955-56 by 7 per cent above the level of the preceding year. The production of capital goods increased by 28.3 per cent over the preceding year; corresponding increases for intermediate and consumer goods being 5 and 6.2 per cent respectively. Imports of machinery increased to Rs. 112 crores compared to Rs. 85.3 crores in the preceding year. The growing demand for capital goods was also reflected in the increase in the domestic production of machinery items such as spinning ring frames, carding engines, transformers, electric motors, diesel engines and structural goods. During the year, developmental commodities like iron and steel and cement were in greater demand and were also available in somewhat larger quantities. All these indications suggest that in 1955-56 industrial activity was sustained at a high level.

8. Development Councils were set up during 1955-56 for the following industries:

- (1) Light Electrical Industries,
- (2) Heavy Electrical Industries,
- (3) Pharmaceuticals and Drugs,
- (4) Heavy Chemicals (Alkalies),
- (5) Woollen Textiles,
- (6) Art Silk Textiles.

These and the other Councils set up earlier devoted themselves to the formulation of programmes of development under the Second Five Year Plan for the industries assigned to them.

9. Among the industrial products manufactured for the first time during the year were alternators, typewriters, self-doffing jute sliver spinning frames, tea dryers, clinker cooler and clinker breakers, delivery valves and pump elements for fuel injection equipment, vertical multi-cylinder diesel engines, certain sizes of drilling machines, all geared head bench lathes and hypodermic needles, hydrogen peroxide, penicillin, and plastic emulsion paints for building and aircraft finishes.

DEVELOPMENT IN THE PUBLIC SECTOR

10. During 1955-56, the penicillin plant of Hindustan Antibiotics, Ltd., the Integral Coach Factory, Perambur, the Machine Tool Factory at Jalahalli, and the electronic and wireless equipment manufacturing plant of Bharat Electronics Ltd., went into production, Industrial units which had come into production in the preceding year, such as the coke-oven plant of the Sindri Fertilizer Factory, the D.D.T. Factory, the NEPA Mills and the U.P.'s cement

factory recorded a rise in production. The Mysore Iron and Steel Works commenced the smelting of iron ores in the second electric pig iron furnace which went into operation in December 1955. The Bihar superphosphate plant, however, was still incomplete at the end of March, 1956.

11. During 1955-56 Indian Telephone Industries took up the production of a larger number of component parts, so that almost the entire series of components of telephone instruments and 70 per cent of components relating to auto-exchanges are now being manufactured within the country. The regular production of various types of small exchanges has been begun and a start has been made with the manufacture of 12½ channeled carrier telephone systems for open wire. Among minor items which were developed during 1955-56 by Indian Telephone Industries were magneto telephone inter-cum-telephones, low impedance receivers for the Air Force, Switch Telephone Instruments and Cordless trunk exchange.

12. Following the decision of the Central Government to increase the steel ingot capacity of the Rourkela Steel plant to 1 million tons, a supplementary agreement was entered into with the German combine of Krupp-Demag in July 1955. In accordance with this agreement the technical consultants submitted in November 1955 the first part of their final report. With some modifications, Government approved the plant capacities, pattern of development and processes suggested by Krupp-Demag. To save time, Hindustan Steel Ltd., prepared specifications and obtained tenders even while the project report was under preparation for portion of the plant in respect of which no radical re-designing was involved on account of the decision to increase the capacity of the plant. Civil construction works, and arrangements for the supply of water and power at the site of the plant were taken in hand. With the assistance of the Indian Bureau of Mines preliminary steps were also taken for the survey and development of mineral deposits e.g., iron ore in the Taldih range and limestone in the Hathibari area near Birmitrapur. A total expenditure of about Rs. 5.0 crores* was incurred on the project during 1955-56. The relatively slow progress made during the first five year plan in the execution of the steel plant project is accounted for by the time taken in negotiating with a foreign firm regarding the agreement for collaboration, the volume of preparatory work involved and the time taken in determining the final size of the plant.

13. In 1953 it was agreed to establish an electrical insulators plant at the Government Porcelain Factory, Bangalore. The scheme made good progress in 1955-56 and the plant was expected to be commissioned in 1956-57.

*Revised estimate.

14. After enquiry by an expert committee in the early months of 1955, the Durgapur Project of the West Bengal Government was approved in May 1955. During the following months, the State Government placed orders for the coke-oven and by-product plant with Messrs. Karl Still Ltd., and for a 60,000 kW thermal power plant which had been visualised as an integral part of the Durgapur scheme. An investment of about Rs. 90 lakhs is estimated to have been made on this project.

ACTION ON PROJECTS PROPOSED FOR DEVELOPMENT UNDER THE SECOND FIVE-YEAR PLAN

15. Preparatory work on projects to be developed under the Second Five Year Plan was an important part of the work undertaken in 1955-56. After preliminary studies, locations of the following industrial projects were agreed upon:

Project	Location
Second D.D.T. factory.	Alwaye, Kerala
Third Steel Plant.	Durgapur (West Bengal)
Second Fertilizer Factory	Nangal (Punjab)
Third Fertilizer Factory	Rourkela (Orissa)
Fourth Fertilizer Factory	Neiveli (Madras)
Heavy Electric Plant Project	Bhopal

The Central Government also entered into an agreement under the Indo-U.S. technical cooperation programme for the heavy foundry (with annual capacity of 7,000 tons of heavy steel castings) which was proposed to be developed under the expansion scheme of the Chittaranjan Locomotive Factory.

16. The project report for the Bhilai steel plant was received in December 1955 and civil construction work at the site of the plant was taken in hand. In regard to the Durgapur steel plant, a British consortium of machinery manufacturers submitted preliminary specifications and estimates of plant cost at the beginning of 1956. Six months later a broad agreement on price and credit terms was reached between the Central Government and the consortium. In 1955-56 a total expenditure of Rs. 3.38 crores was incurred on the two steel projects at Bhilai and Durgapur.

17. In November 1955 an agreement for technical assistance for the Heavy Electrical Equipment Project was concluded with Associated Electrical Industries Ltd.

18. The production recorded by major state enterprises and the investments made in 1955-56 are shown in the following statement along with comparable data for the preceding year. It will be seen in several cases the targets were exceeded as for instance, in ammonium sulphate, penicillin, dry core cables, locomotives and cement.

Sl. No.	Scheme	Unit	Production 1954-55	Target 1955-56	Production 1955-56	Investment 1954-55 (Actuals)	1955-56 (Revised)
						(Rs. lakhs)	(Rs. lakhs)
1.	First Integrated Steel Works	. . . Tons	..	350,000 tons of pig iron	..	130.8	500.0
2.	Hindustan Shipyard	. . . G.R.T.	10,280	20,000	13,000	113.8	114.8
3.	Hindustan Machine Tools	. . . Nos.	Negligible	200	17	163.0	82.0
4.	Sindri Fertilizer Factory (Ammonium Sulphate)	Tons	298,300	315,000	326,000	95.0	163.0
5.	Hindustan Antibiotics (Penicillin)	. . . Mill	..	4.8	6.6	68.6	76.5
		mega units					
6.	Hindustan Cables	. . . Miles	112	470	525	32.2	12.3
7.	Hindustan Insecticides (D.D.T.)	. . . Tons	..	700	284	17.9	22.0
8.	Chittaranjan Locomotives	. . . Nos.	98	92	125	15.9	3.4
9.	Integral Coach Factory	. . . "	..	50	20	205.0	235.0
10.	Indian Telephone Industries	. . . "	49,100	50,000	50,000	111.0	Nil
	Telephones, Exchange Lines	. . . "	29,000	35,000	35,000		
11.	Mysore Iron & Steel	. . . '000 tons	26.9	100	35.0	16.8	30.3
	Steel	. . . "	50.3	100	52.4		
	Pig Iron	. . . "	74,100	90,000	76,837		
	Cement	. . . Tons					
12.	U. P. Govt. Cement Factory	. . . "	84,400	2,00,000	2,60,000	64.6*	70.8
13.	NEPA Mills (Newsprint)	. . . "	Negligible	30,000	4,200	82.7*	19.6
14.	Bihar Government Superphosphate Factory	. . . "	..	16,500	..	6.0	14.2

* Revised estimates.

Note.—The overall fixed investment in 1955-56 on projects listed above and on schemes under the Second Five Year Plan e.g. the second and third steel plants, the second DDY factory and the heavy electrical plant equipment project has been estimated at Rs. 18 crores.

NATIONAL INDUSTRIAL DEVELOPMENT CORPORATION

19. Towards the latter of 1955 it was agreed that the National Industrial Development Corporation (NIDC) should process the following projects:

- (a) establishment of steel foundries, forge and steel structural shops;
- (b) manufacture of intermediates for dyestuffs,
- (c) manufacture of wood pulp,
- (d) manufacture of carbon black,
- (e) manufacture of sulphur from pyrites,
- (f) manufacture of printing machinery,
- (g) manufacture of compressors and fractional horse-power motors, and
- (h) manufacture of refractories.

The NIDC also set up two boards—one in Calcutta and the other in Bombay—to examine applications from the jute and cotton textile industries for loans to carry out rehabilitation and modernisation programmes.

20. On behalf of the NIDC, the Ministry of Iron and Steel took up the question of setting up of steel structural shops. Two shops were proposed to be established, one at Bhilai as a structural-cum-machine shop and the second at Durgapur as a purely structural shop. A preliminary report on the Bhilai shop was prepared and quotations were received from Germany, U.K. and Austria. Quotations for certain preliminary works and facilities in connection with the structural shop at Durgapur were also received from a British firm.

In connection with the project for the manufacture of dyestuff intermediates, a technical team from Messrs A.C.N.A. (Montecatini) visited the country in November 1955 and completed its studies.

In regard to the proposal for the manufacture of wood pulp, two expert teams, one from Germany and another from Italy, visited India during the year and collected data regarding raw materials such as eucalyptus, blue gum, wattle, eta reeds, bagasse etc. The reports of these teams had not been received until the end of 1955-56.

As regards refractories, on behalf of the NIDC the Ministry of Iron and Steel arranged to obtain a skeleton project report from a well-known Austrian firm.

Thus, during 1955-56, the activities of the NIDC were mainly confined to the preliminary investigation of a number of basic projects to be developed under its aegis.

DEVELOPMENT IN THE PRIVATE SECTOR

21. *Expansion of installed capacity:* Significant increases in installed capacity took place during 1955-56 in the cement, sulphuric acid, paper and paper board, rayon filament and staple fibre and electric motor and transformer industries. These were due to expansion and modernisation of existing plants as well as the establishment of new units. In the sugar industry, installed capacity expanded by about 100,000 tons and in cotton textiles, the spinning capacity was estimated to have increased by about 150,000 spindles. The percentage increase in capacity in 1955-56 compared to the preceding year under these industries is shown in the following table:

Percentage increase during 1955-56 in capacity in some major industries

Serial No.	Industry	Unit	Installed capacity			Percentage Increase	
			1953-54	1954-55	1955-56	1954-55	1955-56
1.	Cement	'000 tons	4243	4440	4931	4.6	11.1
2.	Sulphuric Acid	Do.	197	209	242	6.1	15.8
3.	Paper & Paper Board	Do.	174	186	210	6.9	12.9
4.	Rayon filament	Million lbs.	11.2	17.2	22.3	53.6	29.7
5.	Staple fibre	Do.	11.2	11.2	16.0	—	42.9
6.	Electric motors	'000 HP	200	200	263	—	31.5
7.	Electric transformers	'000 KVA	328	378	657	15.2	73.8
8.	Sugar	'000 tons	1630	1645	1740	0.9	5.8
9.	Cotton textiles :						
(i)	Cotton Yarn	'000 spindles	11899	11958	12051	0.5	0.8
(ii)	Cotton Cloth (mill made)	'000 looms	199	203	203	2.0	—

22. *Progress on long-term projects:* As regards long-term projects, the implementation of the Steel expansion programmes of TISCO and IISCO gathered momentum during the year. The decision taken by the Central Government in May 1955 to fix a uniform retention price of Rs. 393 per ton was intended to increase the

internal resources of the steel companies for the execution of their programmes. The aluminium project of the Indian Aluminium Company in Orissa was still in the preparatory stage. Of the three soda ash projects approved for development in 1954, resources for financing two projects were secured in 1955 and orders for plant and machinery were under negotiation. Work on the progressive manufacture of diesel trucks and on the heavy foundry project of the Tata Locomotive and Engineering Company proceeded according to schedule during the year. The schemes for the manufacture of vat dyes at Bulsar and at Kalyan were nearly completed. Acquisition of land at Gumia in Bihar and other preliminary works on the industrial explosives project of the Imperial Chemical Industries were completed. At the Caltex Refinery at Visakhapatnam progress was made in respect of site clearance, civil construction and arrangements for the procurement of machinery, the total investment in 1955-56 being Rs. 2.5 crores. Some of the schemes for the manufacture of ferromanganese made satisfactory progress, so that in three cases production was expected to begin in 1956-57.

The expansion scheme of Fertilizers and Chemicals (Travancore) Ltd., for doubling the output of nitrogenous fertilizers had been included as an important project for completion under the first plan, but no significant progress took place. It was decided during the year that this project should be assisted financially by a loan of Rs. 2.5 crores from the Industrial Finance Corporation of India instead of by a direct loan from the Central Government as originally visualised.

23. *Progress in actual production:* The index of industrial production averaged at 129 (1951=100) during the year. The large increases in production recorded by the soda ash, petroleum refining and benzene hexachloride industries in 1955-56 were due to the full utilisation of new capacity which was installed in the preceding year. For the automobile industry, the year proved to be a turning point, following a substantial expansion of demand. The data relating to the expansion in output recorded by a few important industries are furnished in Table 7.

INVESTMENT IN THE PRIVATE SECTOR

24. The upward trend in the raising of resources from the investment market for industrial expansion which was observed in 1954-55 was more pronounced during 1955-56. An amount of Rs. 98 crores was sanctioned for industrial issues in 1955 as against Rs. 28 crores for non-industrial purposes. These sanctions were the

highest since 1948. The major issues effected during this year were:—

	(Rs. Crores)
(a) $5\frac{1}{2}$ per cent debentures of Caltex Refinery	2.0
(b) $5\frac{1}{2}$ per cent debentures of National Rayon Corporation	1.5
(c) 6 per cent preference and ordinary shares of the West Coast Paper Mills	1.6
(d) 5 per cent debentures of the Tata Locomotive and Engineering Company	1.5
(e) $5\frac{1}{2}$ per cent debentures of Delhi Cloth & General Mills	1.0
(f) $5\frac{1}{2}$ per cent cumulative preference shares of Rohtas Industries	1.14
(g) $5\frac{1}{2}$ per cent cumulative preference shares of the Sirpur Paper Mills	1.00
(h) Ordinary shares of TISCO inclusive of the premium	13.5
(i) Ordinary shares of Associated Cement Companies, inclusive of the premium	6.36

25. As regards the direct loans from the Central Government they were mainly for the steel expansion programmes the amounts advanced being Rs. 4.39 crores for TISCO and Rs. 1.78 crores for IISCO.

There was also marked increase during the year in the activities of the Industrial Finance Corporation of India (IFC) and the State Finance Corporations. The IFC sanctioned loans aggregating Rs. 13.39 crores to 41 industrial concerns during the year 1955-56 as compared to loans for Rs. 7.08 crores to 23 concerns in the preceding year. Three new State Finance Corporations came into existence during 1955-56, thus raising their total number to 13. The amounts sanctioned and disbursed by these bodies, Rs. 3.03 crores and 1.54 crores respectively, were a distinct improvement over the previous year.

The Industrial Credit and Investment Corporation of India, was still in the early stages of development during 1955-56. It underwrote new issues to the extent of about Rs. 150 lakhs.

26. The actual investment on fixed assets in industries in 1955-56 is estimated at about Rs. 85 crores compared to Rs. 50 crores in the preceding year. Of this amount about Rs. 22 crores are estimated to have been spent on the expansion and modernisation of the iron and steel industry, Rs. 7 crores on the cotton textile industry, Rs. 11 crores on the Trombay and other power schemes, Rs. 5.5 crores on cement and refractories and Rs. 5 crores on the projects of the sugar industry.

C. DEVELOPMENT OF MINERAL RESOURCES

27. The programme for the development of mineral resources under the First Five Year Plan envisaged:

- (1) systematic and detailed investigations and surveys by the Geological Survey of India (GSI), the Indian Bureau of Mines (IBM) and the National Laboratories for the quantitative and qualitative assessment of the country's reserves of important minerals;
- (2) reorganisation of the State collieries; and
- (3) preliminary geological and geophysical surveys of selected areas for petroleum.

To begin with, a provision of Rs. 106 lakhs was made for the expansion of the Indian Bureau of Mines and the further expansion of the Geological Survey of India. In 1955, with a view to accelerating the pace of mineral surveys an interim further expansion of the two departments involving additional expenditure to the extent of about Rs. 134 lakhs was approved. Provision in respect of some of the National Laboratories also included certain items of investigation for minerals like coal, manganese ore, chromite etc. For the reorganisation of State collieries a provision of Rs. 145 lakhs was made in the Plan. The programme relating to petroleum envisaged exploration in participation with private companies as well as Governmental exploration.

The progress of expenditure on programmes of the GSI and the IBM is set out below:—

(Rs. in lakhs)

	1951-52		1952-53		1953-54		1954-55		1955-56		1951-56	
	GSI	IBM	GSI	IBM	GSI	IBM	GSI	IBM	GSI	IBM	GSI	IBM
Plan	8.30	2.29	13.23	6.92	14.30	8.64	16.30	10.45	17.53	143.78	69.65	172.08
Actuals	1.09	0.29	4.73	1.22	5.30	3.38	9.77	7.24	16.48	19.36	37.37	31.49

During the first two years of the Plan, there were delays in the recruitment of technical personnel and in the procurement of equipment.

28. Coal: The Plan envisaged:

- (a) detailed survey of selected coalfields and assessment of reserves of materials suitable for stowing, and

- (b) adoption of measures for the conservation of metallurgical coal such as restriction of output and enforcement of washing and blending and of stowing for conservation.

29. A resurvey of the coalfields of Raniganj, Jharia, Bokaro and Karanpura was undertaken. This has indicated in the case of the Raniganj and Jharia coalfields substantially larger reserves of coal than had been estimated earlier. Detailed investigations were initiated in the Jhilimilli coalfield, and as a preliminary step to increasing production in the public sector during the second five year plan drilling was begun in the Korba coalfield in Madhya Pradesh.

The Coal Mines (Conservation & Safety) Act passed in 1952 gives the Central Government power to enforce measures of conservation. A Coal Board was set up with a number of advisory committees. As a first step the production of metallurgical coal was pegged in 1952 and thereafter ceilings have been prescribed from year to year for the production of selected grades and for grades I and II coking coal.

Powers have been taken under the Act to extend stowing for safety to cover conservation also.

A committee was appointed to examine and report on problems relating to the establishment of coal washeries in India. After considering the report of the committee it has been decided that generally all coking coal should be washed. The Fuel Research Institute has obtained useful results in studies on washing, blending and carbonisation of coal on a laboratory scale. These investigations are being continued on a pilot plant scale.

30. Although no specific target was fixed in the First Five Year Plan for the production of coal, it was expected that additional demands arising from development programmes envisaged in the Plan would require production to be raised from 32.31 million tons in 1950 to 39 million tons by 1955-56. The table below shows the volume of coal production during the years 1950 to 1956:—

(figures in million tons)

Year	Production
1950	32.31
1951	34.30
1952	36.30
1953	35.97
1954	36.77
1955	38.22

31. *State Collieries*: The progress of expenditure on the scheme for the reorganisation of State collieries for which a provision of Rs. 145 lakhs was made in the plan is given below:—

																				Rs. in Lakhs
1951-52	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	14.61
1952-53	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	10.66
1953-54	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	15.82
1954-55	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	19.97
1955-56	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	*84.86

*Revised estimate.

In view of the need to open new collieries in the public sector to meet the estimated demand for coal during the second five year plan, the Geological Survey of India and the Indian Bureau of Mines took up the detailed prospecting of Korba and Karanpura. Towards the end of the first five year plan a new organisation was set up under a coal Production and Development Commissioner to take charge of the existing State collieries as well as of new collieries proposed to be established during the second plan.

32. *South Arcot Lignite*: With effect from January 1955 the Central Government assumed responsibility for further investigations into the lignite deposits of South Arcot. The services of a firm of technical consultants were obtained under the Colombo Plan and a preliminary project report was prepared. Preliminary pumping tests to prove the feasibility of depressing locally the level of artesian water below the bottom of the lignite belt were initiated. A Project Co-ordinating Committee was set up with representatives from the Central and State Governments.

33. *Other Development Programmes*: With its gradual expansion, the Geological Survey was able to increase the extent of map coverage. On an average 8,000 to 10,000 sq. miles are mapped annually on the scale of 1"=1 mile, the area varying from year to year. Besides geological mapping and investigations of ground water and engineering aspects of geology, promising mineral occurrences noticed during the course of the survey are explored in greater detail. During the first five year plan special attention has been given to following items:—

1. Large-scale structural mapping of the manganese ore belt in Madhya Pradesh. This has shown that the reserves of manganese ore in this area are much larger than estimated hitherto;

2. Large-scale structural mapping of the lead-zinc deposits in Zawar (Rajasthan). This is still in progress;
3. Re-survey of the Karanpura coalfield. This has revealed the existence of new coal seams;
4. Detailed geological investigations of the Jhilimilli coalfield which is reported to contain coking coal;
5. Exploratory drilling of the Bhurkunda coalfield;
6. Systematic mapping of the Kangra District (Punjab) and the adjoining areas in Bilaspur district (Himachal Pradesh) in connection with oil exploration;
7. Gravity and magnetic surveys for oil in the Jaisalmer area (Rajasthan) and Cambay (Cutch);
8. Geophysical investigations of:—
 - (i) the manganese ore belt in Madhya Pradesh for the location of ore bodies in depth;
 - (ii) Sulphide ore bodies in Singhbhum (Bihar) and Chitaldrug (Mysore) for determining their extension. Following the geophysical investigations detailed drilling was started in Chitaldrug area;
9. Exploratory mining of the Amjor pyrite deposits. This has indicated a reserve of about 75,000 tons in a small part of the deposit which was investigated; and
10. Detailed underground mapping of the Kolar gold fields.

In collaboration with the Central Glass and Ceramic Research Institute, the Geological Survey has also done detailed investigations on clays and ceramic raw materials. The Ceramic Research Institute has conducted investigations on the utilisation of waste mica.

34. *Indian Bureau of Mines:* Most of the important mines working iron and manganese ore, chromite and mica have been inspected with a view to studying the methods of mining and ensuring conservation. Valuable data on methods of mining have been collected. Prospecting by drilling was started in the Korba coalfield in connection with the development of new mines in the public sector. In addition, the Bureau of Mines undertook the prospecting of raw materials for the Rourkela and Bhilai steel plants. Among the other investigations undertaken during the period reference may be made to detailed exploratory operations in the Bhotang Copper Mines (Sikkim) with a view to ascertaining their potentiality, detailed study of the diamond deposits of Panna and preliminary reconnaissance survey of diamond bearing formations in

Andhra and Hyderabad States, and investigation of the gypsum deposits in the Andamans and of asbestos in Andhra. In collaboration with the National Metallurgical Laboratory, the Bureau of Mines undertook investigations on the beneficiation of low-grade manganese ore. The investigations, which were conducted on a laboratory scale, have given promising results. The installation of a heavy media separation plant by the Central Provinces Manganese Ore Company was an important step in the utilisation of low grade manganese ore. The Company proposes to put up another washing plant shortly.

35. The Ore Dressing Section of the National Metallurgical Laboratory has conducted beneficiation tests on chromite, manganese ore and kyanite with encouraging results and the investigations on the recovery of pyrite from the rejects of coal washing from the Nowrozabad collieries have been successful. In addition, the Laboratory has carried out a large number of investigations on indigenous sands with a view to determining their adaptability for foundry moulding purposes.

36. *Mineral Legislation:* In the field of mineral legislation further action was taken for framing rules for the systematic development of mineral properties and the framing of rules for this purpose under section 6 of the Mines and Minerals (Regulation & Development) Act, 1948, was finalised. Rules were also drafted under section 7 of the Act for the modification of the terms and conditions of old leases many of which were granted for large areas and for long periods of time. The rules are expected to be issued soon.

37. *Mineral Production:* There was a general increase in the volume and value of mineral production during the first three years of the plan but, as a result of the slump in the manganese ore and mica markets, the volume and value of production dropped sharply in 1954. Statistics of volume and value of production for the more important minerals are given in Table 8 appended to this chapter.

38. *Oil Exploration:* In 1953 and 1955, the Government of India signed agreements with Standard Vacuum Oil Company Ltd. for joint exploration for petroleum in the West Bengal basin. The Standard Vacuum Oil Company have covered an area of about 10,000 sq. miles since January 1954 and have completed certain essential types of geophysical survey. The Government of India contributes 25 per cent of the expenditure while the remaining 75 per cent is found by the Company. The Government's share of expenditure incurred so far on the scheme is of the order of Rs. 64 lakhs.

39. Prospecting licences were granted to the Assam Oil Company over the Hugrijan and Moran areas in Assam subject to the condition that they would form a rupee company with Government participation. The Assam Oil Company are going ahead with prospecting work and out of the 11 wells so far completed, 7 have proved successful.

40. In addition to the scheme of joint exploration for petroleum in the West Bengal basin, departmental exploration for oil was started in the Jaisalmer area in 1955-56. An Oil and Natural Gas Division was established during 1955 in the Ministry of Natural Resources and Scientific Research. Preliminary geological and geophysical investigations for oil were conducted in the Jaisalmer area and in parts of Punjab and Kutch. Technical assistance was obtained from Canada under the Colombo Plan for an aero-magnetic survey of the Jaisalmer area. The survey has been completed and the ground investigations will be intensified in areas selected on the basis of the interpretation of the aeromagnetic data.

TABLE 2
Industrial Development in the Public Sector

Name of the Project	Date of commencement of production	Production in 1950-51	Production in 1955-56	Target of production 1955-56	Achievement %
1	2	3	4	5	6
<i>Central Government</i>					
1. First Integrated Steel Works Second Integrated Steel Works Third Integrated Steel Works	} Under construction		..	..	..
2. Hindustan Shipyard	March '52	..	13,000 GRT	20,000 GRT	65%
3. Hindustan Machine Tools	Oct. 1954	..	17 Nos.	200 Nos.	9%
4. Sindri Fertilizer Factory (Ammonium sulphate)	Oct. 1951	Nil	326,000 Tons	315,000 Tons	103%
5. Hindustan Antibiotics	August 1955	..	6.6 Mill. Mep. Units	4.8 Mill. Mep. Units	138%
6. Hindustan Cables	Sep. 1954	..	525 miles	470 miles	112%
7. Hindustan Insecticides	March 1955	..	284 tons	700 tons	41%
8. Chittaranjan Locomotives	Nov. 1950	17*	125 Nos.	92 Nos.	136%
9. Integral Coach Factory	Oct. 1955	..	20 Nos.	50 Nos.	40%

10. Indian Telephone Industries	1949	4,814 Tele- phones	50,000 telepho- nes, 35,000 Exchange lines	50,000	100%
<i>State Governments</i>					
11. Mysore Iron and Steel Works Steel		30.5* ('000 tons)	35.0 ('000 tons)	100.0 ('000 tons)	35%
Pig Iron		23.0* ('000 tons)	52.4 ('000 tons)	100.0 ('000 tons)	52%
Cement		..	76,837 (Tons)	90,000 (Tons)	85%
12. U. P. Government Cement Factory	1954	..	2,60,000 (Tons)	2,00,000 (Tons)	130%
13. NEPA Mills (Newsprint)	Jan. 1955	..	4,200 (Tons)	30,000 (Tons)	14%
14 Bihar Government Superphosphate Factory	Not completed	..	..	16,500 (Tons)	..

*Production in 1951-52.

TABLE 4
Investment in the Public Sector
(a) Central Projects

Sl. No.	Project	Initial estimate of investment for 1951-56	(Lakh of rupees)					Total
			1951-52	1952-53	1953-54	1954-55	1955-56	
1.	First Integrated Steel Plant	3000.0	..	0.5	22.7	130.8	500.0	654.0
2.	Hindustan Ship-yard	1408.0	181.0	291.1	128.6	113.8	114.8	829.3
3.	Hindustan Machine Tools	963.8	67.9	107.0	0.1	163.6	82.0	420.6
4.	Hindustan Fertilizers	903.0	260.2	182.8	113.6	95.0	163.0	814.6
5.	Sindri Antibiotics	206.6	2.1	7.7	52.8	68.6	76.5	207.7
6.	National Instruments	182.0	14.5	33.5	29.8	6.3	14.0	98.1
7.	Hindustan Cables	129.7	2.0	16.4	65.0	32.2	12.3	127.9
8.	Hindustan Insecticides	39.1	Nil	0.1	15.0	17.9	22.0	55.0
9.	Hindustan Locomotives	473.0	237.0	84.0	18.0	15.9	3.4	358.3
10.	Integral Coach Factory	400.0	4.0	48.0	92.0	205.0	235.0	584.0
11.	Indian Telephone Industries	130.0	65.0	33.0	82.0	111.0	Nil	291.0

12. Others	417.9	65.9	27.3	71.4	N.A.	N.A.	*164.6
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TOTAL	8253.1	899.6	831.4	691.0	960.1	*1223.0	*4605.1
(b)—Projects of State Governments							
1. Mysore Iron & Steel Works	283.0	40.0	27.0	17.0	16.8	30.3	131.1
2. U. P. Cement Factory	230.5	43.1	55.0	84.8	64.6	70.8	318.3
3. Nepa Paper Mills	200.0	50.3	15.9	96.5	82.7	19.6	265.0
4. Sir Silk Ltd.	200.0	65.6	43.7	1.0	NIL	NIL	110.3
5. Others	242.3	13.9	22.4	17.2	NIL	NIL	53.5
TOTAL :	1155.8	212.9	164.0	216.5	164.1	120.7	878.2
GRAND TOTAL :	9408.9	1112.5	995.4	907.5	*1124.2	*1342.7	*5483.3

* Subject to minor amendments.

TABLE 5
Progress of Investment in the Private Sector

REVIEW OF THE FIRST FIVE YEAR PLAN

Sl. No.	Name of Industry	1951-53 Rs. (In Lakhs)	1953-54 Rs. (In Lakhs)	1954-55 Rs. (In Lakhs)	1955-56 Rs. (In Lakhs) (Provi- sional)	1951-56 Rs. (In Lakhs)	Percent- tages
1	2	3	4	5	6	7	8
							18.7
							1.8
							0.9
							0.1
							18.4
							3.2
							2.5
							0.7
							3.2
							0.4
							0.6
1.	Iron and Steel (Main Producers)						
2.	Iron and Steel (Others)						
3.	Aluminium						
4.	Other Metals						
5.	Petroleum Refining						
6.	Heavy Chemicals and Fertilisers						
7.	Drugs, Pharmaceuticals, Dyes, and Plastics						
8.	Miscellaneous Chemicals						
9.	Locomotives including Telco Foundry						
10.	Diesel Engines and Pumps						
11.	Textile Machinery						

TABLE 6

Distribution of Investment in the Private Sector

Name of Industry†	Estimate under First Plan	Investment as now estimated to have been actually incurred
(Rs. in crores)		
1. Metallurgical Industries (Iron and Steel, aluminium, lead etc.)	52.2	49.7
2. Petroleum refining	64.0	45.0
3. Chemical Industries (heavy chemicals and fertilizers, drugs and pharmaceuticals, dyestuffs and plastics)	13.5	12.7
4. Engineering Industries (heavy and light)	18.0	22.4
5. Cotton Textiles	9.0	20.0*
6. Sugar Industry	0.1	5.0
7. Rayon Textiles (including staple fibre and chemical pulp)	14.5	8.0
8. Cement	15.4	14.3
9. Paper & Paper Board	5.4	9.3
10. Electric Power generation and distribution	16.0	32.6
11. Others	25.2	13.9
TOTAL	233.3	232.9

*Overall investment inclusive of minor expansions, replacements and modernisation is estimated at Rs. 80 crores.

TABLE 7
Progress of Industrial Production in the Private Sector in 1955-56

S. No.	Item	Unit	Production					Percentage increase	
			1953-54	1954-55	1955-56	in 1954-55 in 1955-56 compared to 1953-54 to 1954-55			
1	2	3	4	5	6	7	8		
1.	Finished steel	. . . . .	1,072	1,244	1,239	16.0	..		
2.	Aluminium	. . . . . Tons	3,846	5,476	7,333	42.4	33.9		
3.	Automobiles	. . . . . Nos.	12,629	16,034	25,272	27.0	57.6		
4.	Carding engines	. . . . . Nos.	272	511	618	87.9	20.9		
5.	Spinning ring frames	. . . . . Nos.	197	478	908	142.6	89.9		
6.	Locomotives	. . . . . Nos.	22	47	54	113.6	14.9		
7.	Wagons	. . . . . '000 numbers	6,882	10,689	14,300	55.3	33.8		
8.	Ball and roller bearings	. . . . . '000 K.V.A.	692	670	889*	—3.2	32.7		
9.	Electric Transformers	. . . . . '000 numbers	327	434	625	32.7	44.0		
10.	Sewing Machines	. . . . . '000 numbers	68	81	111	19.1	37.0		
11.	Bicycles	. . . . . '000 numbers	289	401	513	38.8	27.9		
12.	Ammonium Sulphate	. . . . . Tons	58,000	66,700	54,000	15.0	—19.0		
13.	Sulphuric Acid	. . . . . '000 tons	120	160	167	33.3	4.4		
14.	Soda Ash	. . . . . '000 tons	56	54	81	—3.6	50.0		
15.	Caustic Soda	. . . . . '000 tons	25	32	35	28.0	9.4		

S. No.	Item	Unit	Production				Percentage increase		
			1953-54	1954-55	1955-56	in 1954-55 in 1955-56 compared compared to 1953-54 to 1954-55	6	7	8
1	2	3	4	5	6	7			
16.	Dyestuffs	Million lbs	1.6@	3.6@	4.1@	125.0	13.9		
17.	Benzene Hexachloride	Tons	154@	43.1@	1,603@	181.8	269.4		
18.	Cement	'000 tons	4,028	4,418	4,592	9.7	3.9		
19.	Paper	'000 tons	137	169	187	23.4	10.7		
20.	Petroleum Products— (i) Motor Spirit	Excise receipts Rs. crores	2.5	9.9	24.3*	296.0	145.4		
	(ii) Kerosene	"	0.33	0.93	2.55*	181.8	174.2		
21.	Rayon filament	Mill. lbs.	10.2	13.0	16.0	27.5	23.1		
22.	Staple fibre	Mill. lbs.	0.3	9.8	13.7	3166.7	39.8		
23.	Sugar**	'000 tons	1001	1,590	1,860	58.8	17.0		
24.	Cotton textiles— (i) Yarn	Mill. lbs.	1520	1,577	1,641	3.8	4.1		
	(ii) Mill made cloth	Mill. yds.	4906	5,046	5,102	2.9	1.1		

* Estimated.

@ Figures relate to Calendar year.

** Relates to Crop season (Nov.-October).

TABLE 8

Volume and value of Mineral Production during the First Five Year Plan

		1950	1951	1952	1953	1954	1955
Coal . . .	'000 tons Rs. lakhs	32307 4668	34432 5048	36304 5362	35980 5276	36880 5390	38236 5603
Iron Ore . . .	'000 tons Rs. lakhs	2965 154	3657 210	3926 268	3855 281	4308 289	4663 324
Manganese Ore . . .	'000 tons Rs. lakhs	883 848	1292 1783	1462 2245	1902 2948	1414 1954	1584 1833
Chromite . . .	'000 tons Rs. lakhs	17 6	17 9	35 18	65 26	46 14	89 27
Ilmenite . . .	'000 tons Rs. lakhs	213 33	224 40	225 37	215 92	241 80	251 131
Bauxite . . .	'000 tons Rs. lakhs	64 8	67 8	64 8	71 8	75 8	81 8
Kyanite . . .	'000 tons Rs. lakhs	35 33	43 59	27 63	15 24	42 88	12 17
Sillimanite . . .	'000 tons Rs. lakhs	1 0.8	4 2	5 4	5 5	3 2	2 1
Magnesite . . .	'000 tons Rs. lakhs	53 11	117 19	89 16	93 18	71 15	58 13
Gypsum . . .	'000 tons Rs. lakhs	206 14	204 13	411 31	586 39	612 42	690 45
Copper ore . . .	'000 tons Rs. lakhs	360 120	369 194	325 163	238 114	343 187	353 258
Lead concentrates .	'000 tons	..	2	2	3	3	N.A.
Lead metal produced	'000 tons Rs. lakhs	..	0.8 15	1.1 17	2 18	2 23	2.5 31
Zinc concentrates .	'000 tons	..	2	4	4	4	4.8
Total value of all min- erals . . .	Rs. lakhs	83,41	1,05,55	1,08,04	1,12,78	1,02,52	1,05,58

CHAPTER X

VILLAGE AND SMALL INDUSTRIES

THE First Five Year Plan focussed attention on the place of village and small industries in the scheme of national planning. The central aims in relation to village and small industries which were expressed in the Plan are far from being fulfilled, but important beginnings have been made, the role of small industries is now much more fully recognised and the way has been prepared for the steady implementation of larger and more ambitious programmes. During the period of the first plan, especially since 1953, a number of institutions for promoting different groups of small industries have been established, notably the Khadi and Village Industries Board, the Handloom Board, the Handicrafts Board and the Small-scale Industries Board whose work is closely associated with the Small Industries Service Institutes and the National Small Industries Corporation. Each of these Boards has functioned on a national scale and has tried to evolve, in cooperation with State Governments and other organisations, arrangements for co-ordination, technical training programmes, facilities for marketing, standardisation and design and forms of assistance for artisans, which together constitute a considerable effort in support of a vital sector of the national economy. Through the greater emphasis which is being given in community project areas to village and small industries, the roots of this effort may be expected to go deeper into the life of the people in each area, but technical and administrative organisations in the States are still very weak and much remains to be done. Nevertheless, it will be true to say that as a result of programmes undertaken and the institutions established during the first plan, small industries have now an assured place in Indian planning and their key role in diversifying the rural economy and expanding employment opportunities will continue to be emphasised.

2. Except in a few States, the greater part of the initiative in enlarging the programmes for the development of small industries has come from the Government of India. The Central Government set up the various Boards, provided the bulk of the finance, helped in the establishment of training and other institutions and assisted States in embarking upon larger programmes. It has not yet been fully recognised that the vitality of most small industries depends

on the degree to which they become integrated with the development programmes and the needs of each local area. Where industries have certain common features, and problems, they naturally come within a distinct group. There is, however, danger of excessive emphasis on demarcation between different groups of small industries and of overlooking the common requirements and problems of the sector and the need of common planning between different branches of small industry. A conclusion from the experience of the first plan which has to be stressed is that although there may be shifts of workers and changes in technology which may represent movements *interse* between different categories of small industries, the prospects of each of them depend upon the vitality, efficiency and growth of the small industry sector as a whole. For each organisation to succeed in the pursuit of its own separate programmes, it is now more important than ever that there should be adequate co-ordinating and planning arrangements to serve them all and to build up the sector of village and small industries as a whole in relation, on the one hand, to agriculture and, on the other, to large-scale industry.

3. In the first five year plan, at the Centre, the total allotment originally made was about Rs. 17.5 crores. In addition about Rs. 20 crores became available from the proceeds of a cess levied on the textile industry for the development of Khadi and handloom industry. In the States, the provision made was about Rs. 12 crores. Against these provisions, the expenditure incurred is estimated to be about Rs. 43.7 crores, of which Rs. 33.6 crores were incurred by the Central Government and agencies responsible to it and Rs. 10.1 crores, in the States. At the Centre, out of Rs. 33.6 crores, handloom accounted for Rs. 12.2 crores, khadi for Rs. 12.3 crores, small-scale industries for Rs. 4.4 crores, village industries for Rs. 2.9 crores, handicrafts for Rs. 82 lakhs, sericulture for Rs. 65 lakhs and coir for Rs. 30 lakhs. In the community project areas also there was an outlay on the development of rural crafts and industries of Rs. 1.8 crores.

STATE PROGRAMMES

4. Few States had clearly worked out programmes for the development of their village and small industries. It would not be incorrect to suggest that only recently has precise knowledge regarding the economic and organisational problems of individual small industries begun to be gathered. In different branches of small industries in which merchants and middlemen play the major role, the industrial estates which are now beginning to be established in numbers, are expected to bring into existence both new classes of skilled workers

and new classes of small-scale entrepreneurs. During the first five year plan, however, State programmes provided mainly for the continuance or elaboration of programmes which had been carried on for many years before. These related, broadly speaking, to the strengthening of departmental organisations, training, marketing, research and assistance to specific but limited schemes of development for selected small industries. From an average outlay of less than Rs. 150 lakhs in the first three years of the plan, in the fourth year States spent Rs. 228 lakhs and in the fifth and the last year the revised estimate of expenditure was Rs. 334 lakhs. Most of the schemes included in the State plans were small in magnitude, only 23 out of 229 involving a total outlay of more than Rs. 10 lakhs.

5. In a number of Part 'B' and Part 'C' States Industries Departments were strengthened, but on the whole at the end of the plan, they were still inadequately staffed. Industrial cooperative associations or societies were promoted in several States. In Mysore 401 such societies were set up in rural areas with some 40,000 shareholders and 82 craft industrial cooperatives were also organised. In Bombay, a number of district industrial cooperative associations and apex bodies for primary industrial societies were organised. Mysore's scheme of rural industrialisation was also extended to Andhra and Madras.

6. Almost every State expanded its programme for establishing training institutes, demonstration centres, training-cum-production centres, tuitional classes and peripatetic schools. In Bombay in 1955-56, 106 peripatetic schools trained more than 1,000 students, bringing the total number of trainees during the plan period to 4,500. In the Punjab, 600 artisans received training scholarships and 400 artisans were trained in peripatetic schools for dyeing, calico printing, textiles, etc. Training was also organised on an extensive scale in U.P. In Khadi, for instance, about 19,000 students were trained. In Bihar also, during 1955-56, 291 persons were trained in tuitional classes and 32 at the cottage industries training institute at Patna. These illustrations suggest that despite the expansion in training facilities for artisans which has taken place during the past few years, their absolute magnitude is still inadequate. This observation applies also to the provision of research facilities. Useful work was done at a number of institutions, such as, the cottage industries experimental workshop and the village industries research laboratory at Poona, the cottage industries research centre in Mysore, the sericulture centre in Assam and the research centre for salt in Rajasthan. These, however, mark only small beginnings in the task of studying and investigating numerous problems of small industries which need urgent attention. Marketing schemes undertaken in the States have sought mainly to provide means for the sale of

cottage industry products in large towns which offer potential markets. Thus, several States have set up emporia and sales depots. In 1955-56, emporia were established in Pepsu, Rajasthan, U.P., Punjab and Jammu & Kashmir and sales depots for silk were set up in West Bengal and Mysore and for handloom in Bombay and the Punjab. Emporia and sales depots can fill a significant role, especially for those cottage and small industry products which have to find markets away from the places of manufacture.

CENTRAL AND CENTRALLY SPONSORED PROGRAMMES

7. The progress of Central expenditure on village and small industries during the first five year plan is shown in the following statement:—

Progress of Development Expenditure

						(Rs. lakhs)
Industry	1952-53	1953-54	1954-55	1955-56 (Revised)	1951-56 (Total)	
1	2	3	4	5	6	7
Handloom . . .	0.14	5.33	293.52*	353.25*	569.97*	1223.21
Khadi . . .	1.68	19.00	181.43*	332.70*	703.00†	1237.81
Village Industries .	0.59	0.73	15.91	67.61	205.00‡	289.84
Small-scale Industries .	5.61	3.99	31.68	147.44	252.00	440.72
Handicrafts . . .	4.50	2.60	14.00	16.00	45.00	82.10
Sericulture . . .	1.42	2.70	3.88	7.91	50.00	65.91
Coir . . .		2.18	1.56	5.00	21.00	29.74
TOTAL . . .	13.94	37.53	541.98	929.91	1845.97	3369.33

*Expenditure met from the Cess fund.

†Latest estimate is Rs. 698.23 lakhs.

‡Latest estimate is Rs. 202.12 lakhs.

It will be seen that in each branch of small industry there was increase in expenditure, especially from the third year of the plan. Although funds were provided mainly by the Central Government much of the responsibility for execution fell on State Governments and other agencies set up in the States.

HANDLOOM

8. The output of handloom cloth stood at 843 million yards in 1951. It rose to 1,358 million yards in 1954-55 and to 1,450 million yards in 1955-56. The target set for the plan period was 1,700 million yards. The increase in production was due to (a) policies intended to enlarge the market for the handloom weaver, and (b) measures of positive assistance. In April 1950, a notification issued by the Central Government reserved the production of certain varieties of cloth such as *dhoties* of prescribed width and borders, *saries*, *lungis*, etc., for the handloom industry. At the end of 1952, textile mills were directed not to produce in any month more than 60 per cent of the average quantity of these categories of cloth packed for sale in India during the year 1951-52. In 1953 an additional excise duty was levied on the production of bordered *dhoties* in excess of 60 per cent of the production by a textile mill during 1951-52. These restrictions have continued to be in force. The loom capacity of the textile industry was also not increased.

9. The positive measures taken to assist the handloom industry made a valuable contribution to the rehabilitation of the handloom industry during the first five year plan. It was recognised that without bringing handloom weavers into cooperatives, it would not be possible to render sufficient assistance to them. Loans were given to the extent of 75 to 87½ per cent of the share value to enable weavers to join cooperatives. Working capital was provided at a uniform rate of Rs. 200 per cotton loom and Rs. 500 per silk loom. The number of handlooms included in cooperatives, which stood at 788,000 in 1953-54 increased by 1955-56 to 1,026,000 which represented over 60 per cent of the estimated total number of active looms. Weavers cooperative organisations at the primary level were supported by appropriate federal organisations which could supply raw-materials, offer technical advice, provide better marketing facilities and arrange for credits from cooperative sources. In all, during the first plan, working capital to the extent of Rs. 408 lakhs and share capital to the extent of Rs. 46.4 lakhs was given to weavers. Assistance for improved equipment was given to the extent of Rs. 75.5 lakhs. The rebate on sales of handloom cloth, which varied from 9 pies to two annas in the rupee, accounted for Rs. 227 lakhs and the outlay on improved marketing facilities amounted to Rs. 177 lakhs. In March 1955, the All-India Handloom Fabrics Marketing Co-operative Society was registered for undertaking marketing on a national scale and for establishing warehouses and emporia in the principal cities. The Society was also to take over the foreign marketing scheme which was being run by the Madras Co-operative society as agents. By the end of 1954-55, 756 sales depots and mobile

vans were brought into existence; in the following year 500 additional sales depots and 15 mobile vans were added. In 1955-56, sales of handloom cloth to the extent of about 180 million yards received the benefit of the rebate.

10. Improvement in the quality of handloom fabrics and measures to establish standards were assisted through improvements in equipment and the adoption of improved methods. Grants were given to weavers organised in cooperatives for purchase of improved equipment and some common processing plants were established for dyeing, calendering and finishing. Specifications were also drawn up for certain types of fabrics by the Indian Standards Institution. Two cooperative spinning mills were set up, one at Tirunelveli and the second at Guntakal. The close connection between the weaver's housing and his efficiency in production was recognised and a number of cooperative housing colonies for weavers were organised in Mysore, Bombay and Madras. A scheme for converting handloom factories run by middlemen into industrial cooperatives was approved on a pilot basis and was carried out in respect of a factory in Malabar. A number of cooperative societies for silk weavers were started in Madras, Andhra and Uttar Pradesh. Design centres were established and assistance was also given for the development of the woollen handloom industry.

KHADI

11. Programmes relating to khadi development received sustained attention from the All-India Khadi and Village Industries Board. The Board set up an extensive organisation consisting of a central office, zonal offices and a corps of organisers. In 23 States, State Boards were also set up, of which the Boards in Bombay, Saurashtra, Rajasthan, Assam, Hyderabad and Madhya Bharat were given statutory status by the State Governments concerned. In 1950-51, the total value of khadi produced in the country was Rs. 1.30 crores. It increased to Rs. 3.70 crores in 1954-55 and to Rs. 5.35 crores in 1955-56, when the total production stood at about 25.37 million square yards. In 1955-56, khadi production employed 557,000 spinners and 43,000 weavers as against 307,000 spinners and 18,000 weavers two years earlier.

12. As part of its long range training programme, the Board started a Central Training Institute at Nasik, with three regional institutes, to provide training facilities in improved techniques of spinning and weaving. Agency Sales Training Scheme was another training activity taken up by the Board. Besides, a Village Industries Research Institute at Wardha was also set up.

13. To promote the sales of khadi a rebate of three annas on every rupee worth of khadi sold at certified institutions and centres was allowed. The sale of khadi *hundis* was also organised through post offices. A Khadi and Gram Udyog Bhavan was established in Bombay and, encouraged by its success, another similar centre was established in New Delhi. A campaign for popularising khadi and village industries products was also organised and steps were taken to encourage the use of khadi amongst others by public servants.

14. The Ambar Charkha scheme, which is now an important part of the Board's programme, was also begun towards the close of the first five year plan. A pilot scheme for field and technical tests involving a total outlay of Rs. 30 lakhs was approved with a view to determining the feasibility of using Ambar yarn for hand-looms. Technical tests were carried out at six laboratories and field tests were undertaken at 121 centres in different parts of the country of which only 105 submitted reports. In March 1956, a special committee was appointed to examine the technical and economic aspects of the Ambar Charkha.

VILLAGE INDUSTRIES

15. Tentative programmes for developing a number of village industries were indicated in the First Five Year Plan and the Khadi and Village Industries Board was set up for taking further action in consultation with State Governments and other organisations engaged in village industries. The list of village industries selected for action through the Board included hand-made paper, palmgur, ghani oil, handpounding of rice, cottage match, soap-making with non-edible oils, fibre industries, bee-keeping, pottery, village leather industry and gur and khandsari. For a long time, many of these industries had faced, in varying degree, severe problems of competition, changes in demand as well as stagnation in techniques.

16. *Hand-pounding of rice*: The Khadi and Village Industries Board assisted hand-pounding of rice through loans for manufacturing and stocking implements such as *chakkis*, *dhenkis* or winnowing fans, etc., and for stocking paddy. A subsidy was given for the purchase of improved equipment upto 50 per cent of the cost as well as a production subsidy at 6 annas per maund of paddy processed by the hand-pounding method. The Board aided the establishment of 220 co-operative societies for the hand-pounding of rice and organised training programmes for inspectors, instructors and other personnel. The Rice Milling Committee appointed by the Government of India made its recommendations in July, 1955. These

envisaged that no further licences should be issued for new rice mills or for rice milling in combined mills and there should be no additions to capacity in the existing rice mills. The Committee recommended that small huller machines operated with one or two hullers should be eliminated and there should be a cess of 6 annas per maund of paddy milled in rice mills, the proceeds being utilised for organising hand-pounding. Another recommendation was that the existing production subsidy of 6 annas per maund of paddy should be raised to 8 annas per maund. As the plan period ended, the report of the Committee was still under Government's consideration.

17. *Village oil industry*: For the development of the village oil industry the Khadi and Village Industries Board had two main aims, namely, the gradual introduction of improved *ghanis* and assistance to existing *ghanis* to enable them to work to capacity. The first aim was to be achieved mainly by organising model *ghani* centres and providing assistance for the adoption of improved *ghanis*; the second through registration of *ghanis*, so as to bring them under some kind of institutional direction. Facilities were organised for training workers and loans were given for stocking oilseeds and buying seasoned wood for manufacturing *ghanis* of improved types. By the end of the Plan, 100 model centres had been organised and about 11,635 *ghanis* were functioning under the auspices of the Board.

18. *Village leather industry*: The village leather industry exists throughout the country and everywhere the methods followed are wasteful and inefficient. The Khadi and Village Industries Board drew up a programme aiming at maximum recovery and full utilisation of carcasses. This consisted of four main features, namely, the setting up of flaying centres, training-cum-production centres and village model tanneries and the organisation of village demonstration parties. Training facilities in flaying and utilisation of carcass were also arranged at Kara Kendra near Bombay and for tanning at Kallupeti, Calcutta, Wardha, Hyderabad and Bombay. Between 1953-54 and 1955-56, 155 flaying centres were organised. Delays in getting these centres into production occurred on account of lack of trained personnel, the time needed for surveys for ensuring proper location of centres and difficulties in securing suitable land. The task of personnel working for the development of the village leather industry has been none too easy, for, besides the technical and organisational problems involved, they have often to reckon with local prejudices and conflicts. Nevertheless, a useful start has been made and upto the end of January 1956 the Board had disbursed grants to the extent of Rs. 17.70 lakhs and loans to the extent of Rs. 14.13 lakhs.

19. *Cottage match industry*: The Khadi and Village Industries Board adopted a comprehensive programme for the development of the cottage match industry. This included proposals for the organisation of cottage match factories, establishment of marketing depots for the sale of matches produced by cottage factories, training of personnel and research and experimental work. Much valuable work had been done over many years in the Khadi Pratisthan at Sodepur near Calcutta in producing cheap materials for use in the cottage manufacture of matches, but without adequate trained personnel and demonstrations, progress was necessarily slow. By the end of 1955-56 the Board had established 11 divisional offices and assisted the setting up of 28 cottage match factories and a number of co-operative societies. While no difficulty in finding a ready market was experienced, the work done during the plan was essentially of a pilot character.

20. *Gur and khandsari industry*: The development of the gur and khandsari industry has been assisted by the Khadi and Village Industries Board through the grant of loans for the purchase of improved equipment, the subsidised supply of centrifugals and juice clarificants, the organisation of grading and marketing stations and the training of local workers. These programmes are implemented through State Governments as well as registered institutions. Their implementation commenced towards the end of the plan period when 15 co-operative societies were formed, about 680 improved crushers were introduced, 13,080 old *kolhus* were refitted and 48 centrifugals and 30 percolators were distributed.

21. *Palm-gur*: The Board took over the programme for the development of the palm-gur industry earlier carried out under the auspices of the Ministry of Food and Agriculture. Here the main aim was to eliminate middlemen by organising co-operatives, providing technical guidance and removing legal and other handicaps. The central training school known as the Bhartiya Tad Gur Shilpa Bhavan was strengthened, so that it could render technical service to those parts of the country which offer scope for the development of palm-gur. Pilot demonstration stations were established at Udangudi and at Poona. Training schemes were organised in four States and refresher courses and exhibitions were arranged to stimulate interest and improve methods of palm-gur manufacture.

22. *Bee-keeping industry*: The Khadi and Village Industries Board worked out a number of schemes for developing the bee-keeping industry. These included the establishment of area offices, sub-stations and model apiaries, training facilities for field-men and apiarists, subsidised supply of equipment such as bee-hives and loans for stocking implements and honey for

sale. The programme for 1955-56 provided for the strengthening of the area offices and 100 sub-stations established in the previous year, for the addition of 5 new area offices and 50 more sub-stations and for the completion of work on 25 model apiaries. It was recognised that bee-keeping as an industry could make only a slow advance, until trained personnel were available in sufficient number and there was field staff for surveying suitable areas for locating development centres and for training bee-keepers and villagers.

23. *Hand-made paper industry*: By the end of 1954-55 the Khadi and Village Industries Board had established 55 centres for the production of hand-made paper of different qualities. These centres produced 500 tons of paper and employed 2,000 persons. In the last year of the plan, the number of centres increased to 63, of which 27 were assisted with loans and grants for machinery and equipment, subsidy on production and working capital. The Board also assisted 90 schools in introducing the production of hand-made paper as an educational craft and arranged for the training of teachers in these schools. Arrangements were also made for training in the making of high-grade paper by hand.

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24. *Soap making with non-edible oils*: A beginning was made by the Khadi and Village Industries Board during the period of the first plan in developing soap-making with non-edible oils as a new village industry. The prospects of this industry depend on such factors as the availability of large supplies of oil-bearing non-edible seeds like *neem*, survey and location of units for converting such seeds into oil and soap, the organisation of efficient arrangements for the collection of seeds and trained personnel for providing technical guidance. The main aim is to provide seasonal employment in the collection of seeds and to give additional work to *ghanis*. During the last two years of the plan, 133 soap-making centres were organised. Earlier, five production-cum-model centres had been established: The training of personnel was also organised at two centres.

25. *Village pottery*: Like the village oil industry and the village leather industry, improvements in village pottery can be of the utmost importance to the rural economy. To begin with, the Khadi and Village Industries Board confined its activities in support of the industry to training and demonstration. Training was organised at a central training-cum-research institute in the Bombay State and was to be extended to two regional centres in Madhya Pradesh and in Madras. For the first time, an all-India conference of potters and pottery workers was held in December, 1955.

26. *Atta Chakki schemes*: For improving the nutritional value of food grains other than rice, the Khadi and Village Industries Board made a small beginning during the Plan with a scheme for improving *chakkis* through the addition of ball-bearing sets and for manufacturing and supplying *chakkis* of improved types.

27. *Intensive areas programme*: Thirty-five areas each consisting of 30 to 40 villages with a population of 20,000 were selected for developing village industries in an integrated manner and as part of an overall scheme of rural development carried out under the auspices of the Khadi and Village Industries Board. Upto the end of March, 1956 loans and grants amounting to Rs. 16.05 lakhs were disbursed by the Board for selected intensive areas.

SMALL-SCALE INDUSTRIES

28. Small-scale industries are an important sector in the national economy because they can readily adapt modern techniques and small machines, can function as feeders or ancillaries of large-scale industries and can cater to expanding markets. Efforts for promoting small-scale industries were intensified from 1954 onwards along lines recommended by an international team which was sponsored by the Ford Foundation. Broadly, the aim of the programme was to provide financial and technical assistance to the existing small-scale industries and to encourage the establishment of new ones. The three principal requirements of small-scale industries were (a) improvement in techniques of production and management, (b) credit facilities both for investment and for working capital, and (c) provision of common service facilities. For carrying out the programme the Central Government set up a Small-scale Industries Board (which included representatives from the States), appointed a Development Commissioner for Small-scale Industries, and established regional Small Industries Service Institutes and a National Small Industries Corporation. At the same time, the State Governments were assisted in strengthening the staff of Industries Departments. The Central Government undertook to bear 50% of the additional expenditure involved for a period of three years beginning from 1955-56.

29. *Small Industries Service Institutes*: Four regional Small Industries Service Institutes which were established at Delhi, Bombay, Calcutta and Madras were intended to serve as the main centres for an industrial extension service which could provide technical assistance and guidance to small entrepreneurs in urban and rural areas. Branch institutes were set up at Trivandrum, Hyderabad, Patna, Ludhiana, Rajkot and Agra and started functioning during 1955-56. It was also decided to set up such branch institutes at Allahabad, Cuttack, Shillong, Indore, Hubli, and Bangalore. Through the visits

of members of their staff and local demonstrations by mobile workshops, information and advice regarding improved techniques, equipment, designs and layouts, etc., these institutes were to make assistance available in a ready and practical manner to a large number of existing small industries as well as to entrepreneurs wishing to start new industries. The services of foreign experts for a number of particular small-scale industries such as foundry, hand-tools, surgical instruments and others were also secured.

30. *National Small Industries Corporation*: The National Small Industries Corporation, set up in February, 1955 with an authorised capital of Rs. 10 lakhs, was entrusted with many of the commercial and marketing aspects of the development of small-scale industries. To begin with, the Corporation was to seek Government orders for the products of small-scale industries, supply small machines on hire-purchase terms, open wholesale depots for the sale of quality marked goods and operate mobile vans for demonstrating improved methods and equipment and facilitating sales. The Corporation had some success in negotiating for orders with the Central Government's supply organisation. At the end of the first plan, when its work was still in its early stages, it had supplied machines worth Rs. 8 lakhs on hire-purchase terms. A few wholesale depots were opened in principal producing centres, as for instance, for foot-wear at Agra, for locks at Aligarh, for hosiery at Calcutta and for pottery at Khurja. Goods were purchased by the Corporation according to prescribed quality standards and sold to retailers. Three mobile vans were also introduced for the sale of small industry products in distant areas of Punjab and Uttar Pradesh.

31. The Corporation also undertook study of methods for enabling small industries to participate more fully in Government's purchases. Some preliminary steps were also taken for the development of small-scale industries as ancillaries to large industries. In 1955-56 the Central Government accepted in principle the Stores Purchase Committee's recommendations that certain classes of stores should be reserved exclusively for purchase from cottage and small-scale industries, that price differential be allowed to them in relation to the products of large-scale industries, that certain relaxations in standard should be permitted for hand-made products, and that facilities for the registration of cottage and small-scale industries should be improved. The value of purchases made from cottage and small-scale industries by supply organisation of the Central Government increased from about Rs. 75 lakhs in 1953-54 and Rs. 105 lakhs in 1954-55 to Rs. 341 lakhs in 1955-56. The items purchased by the Government included handloom cloth, khadi, hosiery, leather goods, coir products, locks, tentage, etc.

32. *Credit*: The shortage of credit and finance for small-scale industries was always a severe handicap. The assistance given by State Governments under their State Aid to Industries Acts was meagre and did not flow at all easily to small entrepreneurs and artisans. In 1954-55 it was decided to liberalise terms and conditions for the grant of loans to cottage and small industries from State Governments, from cooperative banks and from other agencies. A scheme of liberalised terms and conditions was introduced in June 1955. Under this scheme, the Central Government agreed to contribute in the ratio of 2:1 to the provision made by States from their own resources; and to bear losses in this proportion in the case of loans to private parties, and in the proportion of 3:1 in the case of industrial cooperatives. Loans were to be advanced to small entrepreneurs upto 75 per cent of the value of security offered. Land, buildings, plant, machinery and other assets created out of the loan could be reckoned towards the security. Towards the end of 1955-56, it was further decided that for small industrialists loans upto Rs. 1,000 could be given on execution of personal bonds and loans upto Rs. 5,000 on the security of one or more personal sureties. The proposal was accepted generally by the States, but to give effect to it the existing legislation had to be amended. During the last two years of the plan period a total allotment of about Rs. 3.04 crores was made for grant of loans under the State Aid to Industries Acts, which included funds provided by the Central Government.

33. During 1955-56, State Financial Corporations were established in Madhya Bharat, Andhra and Orissa, thus bringing the total number of such Corporations so far established to thirteen. In 1955-56 State Finance Corporations approved loans amounting to over Rs. 3 crores of which about Rs. 1.5 crores were actually disbursed. In the preceding year the loans approved amounted to about Rs. 1.97 crores and loans disbursed to about Rs. 1.14 crores.

34. With a view to making available to small-scale industries easier and better credit facilities in a coordinated manner, in 1955-56 a "pilot" scheme was taken up by the State Bank of India in consultation with the Reserve Bank of India and in collaboration with other institutions and agencies. The objective of the scheme was to ensure credit facilities to small industries in such a manner that they did not have to approach too many agencies. The scheme was intended to co-ordinate and partly supplement rather than replace facilities already provided by existing agencies to small industries. Its facilities extended to a wide range of cottage and small-scale industries and to handicrafts. The scheme was introduced first in three circles of the State Bank of India, namely, Bombay, Madras and Bengal. After experience had been gained and suitable methods for providing credit to small industries in a coordinated manner had been evolved, it was

posed to introduce a more general scheme which could be adopted on a wider scale.

35. To overcome the difficulties and handicaps often experienced owing to lack of reliable data and back-ground information, systematic studies and investigation into the conditions of some of the small-scale industries were initiated during 1955-56. A central investigation team consisting of economists and engineers was constituted in July, 1955 which completed surveys of a few selected industries in the Northern region. These included sport goods, sewing machines and parts, bicycles and parts, and leather footwear. Later, four more investigation teams were constituted for undertaking similar studies in other regions. For the first time the facts and problems of each small industry came to be studied systematically, not in terms of abstract and general proposals, but in a practical development context. This proved a fruitful approach and led, amongst other things, to the establishment of industrial extension centres in selected areas. To begin with service centres were established for bicycle parts and bicycles at Kanpur, for sport goods at Meerut, for footwear at Trichur, for foundry and agricultural implements at Batala, for scientific glassware at Ambala and for drawing and surveying instruments at Roorkee.

36. Supply of electric power at reasonable rates was recognised to be one of the essential elements in the success of the small-scale industries programme. Proposals for adjusting electricity tariffs to enable small units to obtain power normally at the rate of 1½ annas per unit were worked out. With a view to making power available at the same rate from privately-owned electric supply undertakings as well, the Central Government agreed to provide a subsidy to the extent of 50 per cent of the difference between the current rates and the lower concessional rates.

37. *Common Service Facilities:* In addition to common service facilities provided at industrial extension centres and Small Industries Service Institutes, a number of schemes for providing such facilities were also taken up by State Governments with financial assistance from the Centre. These included workshops for processes like heat treatment, electroplating, etc. For such schemes, the Central Government agreed to provide as loan 75 per cent of the total expenditure including land, buildings, equipment and working capital. During 1955-56 schemes were sanctioned for the establishment of service centres for the lock industry and for pressmetal products. A scheme for a centre for the pottery industry was also approved. Some schemes of the State Governments for providing training and

research facilities and setting up small production units to be run either departmentally or through industrial cooperatives were also approved.

38. One of most important programmes for developing small industries and building up a decentralised sector of industry which has the inherent strength to expand its operations initiated during the first five year plan was the establishment of industrial estates and colonies. These estates and colonies offered the advantage of common services like good sites, electricity, water, gas, steam, railway-siding, etc., and as well as the necessary technical and financial assistance. During 1955-56, 15 industrial estates of different sizes were approved and assistance amounting to Rs. 51 lakhs was sanctioned. The entire cost of the industrial estates was given by the Central Government by way of long-term loans to the State Governments, while the responsibility for construction and management was generally entrusted to the States. The industrial estates at Okhla (New Delhi) and at Naini (Allahabad) were entrusted to the National Small Industries Corporation.

39. *Pilot Projects in Community Project areas:* With a view to initiating a development programme for village and small-scale industries integrated with the programme of rural development and building up the pattern of an industrial extension service, in May 1955, pilot programmes were introduced in 26 community project areas. There was one pilot project in each State and Centrally administered area except for Coorg and the North-East Frontier Agency. A special batch of officers was trained and posted in the different project areas in December, 1955 for conducting rapid surveys and drawing up an immediate programme of development. For ensuring effective coordination of the activities of the various All-India Boards in the pilot project areas and obtaining their guidance an Action Committee at the Centre had been set up in July 1955. Similar committees were also set up in the States. Work in the pilot project areas commenced in the early months of 1956. To begin with, in each area some *ad hoc* schemes assisted by different Boards were taken up. At this stage they were far from being an integrated and well-knit programme.

HANDICRAFTS

40. Development problems of handicrafts are somewhat different from those of small-scale industries or of village industries. This is largely because crafts vary from region to region and craftsmen are scattered in widely separated areas. The main object of programmes taken up under the auspices of the All-India Handicrafts Board, which was set up at the end of 1952, was to provide financial

and technical assistance to existing centres of handicrafts and craftsmen and also to make available greater facilities for marketing, and to improve designs.

41. Development schemes for individual handicrafts were implemented by State Governments, but a few schemes were taken up directly by the Board. These concerned the training of artisans, setting up of pilot projects for selected handicrafts, establishment of design centres, participation in exhibitions, publicity, marketing and research. The Board set up several production and training centres, as for instance, for weaving at Kanjeevaram, for dolls at Bombay, for brocades at Surat, for toy-making at Kondapally, for blue pottery at Delhi, etc. Besides, the Board also initiated a comprehensive marketing survey of handicrafts which was completed before the end of the plan period. It established four regional design centres at Bombay, Calcutta, Bangalore and New Delhi. The Board participated in and also arranged a number of exhibitions within India and also in foreign countries.

42. Financial assistance on an increasing scale was given to the State Governments for the development of local traditional handicrafts, such as, fine mat weaving, brass-ware and bamboo products in Madras; ivory, *chikan* and carpets and druggets in U.P.; brass and bell metal, horn, mat and conch shells in West Bengal; carpets and druggets in Jammu & Kashmir; calico printing in Pepsu and Madhya Pradesh; *himroo*, *paithan*, *bidri* and Nirmal works in Hyderabad; sann hemp products and glass toys in Bombay, brass-ware in Mysore; artistic ivory-ware and carpets and druggets in Rajasthan; and stone carving and silver filigree work in Orissa. Assistance was approved for setting up emporia in Andhra, Assam, Madras, Jammu and Kashmir, Madhya Bharat and Orissa. Institutions like the Vishwabharati in West Bengal, the Indian Co-operative Union at New Delhi and the Kalakeshtra Research Centre and the Mangalore Women's Co-operative Society in Madras were also assisted.

SERICULTURE AND SILK

43. The Central Silk Board, which was set up as a statutory body in 1949 was re-constituted in 1952. The Board is entrusted with the development of sericulture and the silk industry and acts as a co-ordinating agency for the industry as a whole. It provides technical and financial assistance to the States who are responsible for execution. The Board's programme during the plan period included the breeding of improved cocoons, modernising of silk reeling, establishment of foreign race seed stations and training-cum-production centres and provision of research facilities. It also included schemes for assisting the marketing and development of the non-mulberry silk. Apart from improvement in the quality of raw silk,

the production of filature silk increased from 265,445 lbs. in 1951 to 319,896 lbs. in 1954 and to 328,500 lbs. in 1955. The production of Charkha silk which forms nearly 80 per cent of the total production of raw silk, also increased from about 1.660 million lbs. in 1951 to 2.079 million lbs. in 1954 and 2.102 million lbs. in 1955.

44. Among the important schemes taken up during 1955-56 were, the establishment of the Sericultural Research Station in Mysore, installation of a cold storage plant at Srinagar, expansion of the Foreign Race Seed Station at Kalimpong, establishment of a Muga Seed Farm in Assam and a Central Silkworm Rearing station at Coonoor.

45. With a view to bringing greater stability to the raw silk market, since 1955, imports of raw silk are channeled through the Central Silk Board. This step helped to ensure steady and fair remuneration for silk worm rearers and cottage reelers.

COIR

46. The Coir Board was set up in the middle of 1954 under the Coir Industries Act, 1953. The Board undertook a study of various problems of the industry through a series of special committees set up by it and initiated action on their recommendations. It also began a census of coir industrial establishments and spindles as a step towards the registration of producers of coir and coir products. The Board promoted the establishment of cooperative societies for marketing as well as production as the main direction of work for the rehabilitation of the coir industry. In Travancore-Cochin, now comprised within Kerala, which is the principal coir producing area, 120 primary coir cooperative societies, two central coir marketing societies and 22 *thondu vyavasaya* cooperative societies were formed.

VILLAGE AND SMALL-SCALE INDUSTRIES (SECOND FIVE YEAR PLAN) COMMITTEE

47. Reference may be made here to the appointment in June 1955 of the Village and Small-scale Industries (Second Five Year Plan) Committee. The Committee was asked to draw up a programme, industry-wise and wherever possible State-wise, for the utilisation of resources provisionally earmarked for the development of village and small-scale industries as an integral part of the Second Five Year Plan. The Committee reported in October 1955 and its recommendations formed the basis, to a considerable extent, of the programme and policy for village and small industries set out in the Second Five Year Plan.

TRANSPORT AND COMMUNICATIONS

(Rs. crores)

NOTE.—Figures in brackets represent contributions from the Railway Depreciation Reserve Fund which are in addition to the provision for railways in the Plan.

2. Whether we consider railways or roads or shipping or ports and harbours, transport planning has important long term aspects and must under present day conditions, be taken in hand well in advance of the planning of industrial and mineral development. This became increasingly clear as the period of the first plan drew to a close. The lesson applies equally to construction works and to the procurement of rolling stock, equipment and the industrial raw materials needed. Developmental programmes in transport and communications also present considerable problems of technical and administrative organisation and personnel and research, and in these respects also long-term planning is essential.

3. Except for roads and road transport, transport development falls within the purview of the Central Government. Communications are entirely a Central responsibility. Thus, out of the original provision of Rs. 498 crores in the plan, the States accounted for Rs. 89 crores. As was to be expected, the outlay on transport and communications increased steadily. From an average of about Rs. 50 crores during the first two years, Central expenditure rose to Rs. 146 crores in 1955-56, the corresponding figures in the States being Rs. 15 and 33 crores.

I. RAILWAYS

4. The progress of Indian Railways, which have often been described as the country's life line, is now both an index and a major condition of its economic growth. With route mileage of about 34,700 the railways carry the bulk of goods and passenger traffic in the country. Between the years 1950-51 and 1955-56 while agricultural production increased by 18.7 per cent and industrial production by 27.9 per cent, the volume of traffic handled by the Indian Railways increased by 24.8 per cent. From 91.4 million tons in 1950-51 the volume of traffic went up to 114.1 million tons in 1955-56. Furthermore, the pattern of traffic on the Indian Railways underwent some significant changes and there was a marked increase in industrial and mineral traffic. Substantial increases in rail movements were recorded in cement, stone, mineral oils, manganese ore, sugar, iron and steel, and raw cotton. These trends in rail movements give indication of the changes which have taken place in the character of the economy under the impact of the plan. They also illustrate the increasing burden on the railways during the plan period.

5. A decade and more of the most severe strain on the railway system had preceded the formulation of the first five year plan. The plan was, therefore, devoted mainly to the rehabilitation and modernisation of rolling stock and fixed assets and, only to a small extent, to the provision of additional facilities for meeting new needs.

As the plan progressed, the volume of traffic offering increased rapidly and the additional facilities provided by the railways could not keep pace with the increase in traffic. Thus, in the last two years of the plan, while the average rate of daily loadings increased substantially, the volume of outstanding registrations rose at an even greater pace.

6. Against a total allotment of Rs. 400 crores (including the contribution of Rs. 150 crores from the Railway Depreciation Fund) the distribution of outlay between different programmes during the period of the plan was as follows:—

Head	(Rs. crores)						Allocation envisaged in the First Plan
	1951-52	1952-53	1953-54	1954-55	1955-56	Total 1951-56	
Rolling stock, plant and machinery . . .	34.36	33.23	40.37	58.69	85.79	253.44	207.96
Track & bridges . . .	10.72	13.96	10.93	13.93	14.87	64.41	70.47
Other structural engineering works including Integral Coach Factory, Chittaranjan Locomotive Works, Ganga Bridge, Collieries, Ports and staff quarters, etc. . .	10.58	10.48	12.29	15.32	21.81	70.48	69.99
New lines, restoration of dismantled lines and electrification	7.26	3.71	4.01	7.49	10.73	33.20	34.18
Passenger amenities . .	2.45	2.34	2.47	3.03	3.00	13.29	15.00
Miscellaneous items . .	5.52	—3.43*	—5.80*	—2.22*	3.18	—2.75*	2.40
TOTAL . . .	70.89	60.29	64.27	96.24	140.38	432.07	400.00

*The reduction is on account of decrease in stores balances and credit taken for released materials and other recoveries.

The excess of outlay above the plan provision was accounted for by the increased programme for the procurement of rolling stock. The plan had contemplated the procurement of 1038 locomotives, 49,143 wagons and 5,674 coaches. Substantially larger orders for locomotives and wagons were placed and the new stock procured by the end of the plan period was of the order of 1,586 locomotives, 61,257 wagons and 4,758 coaches, of which as many as 684 locomotives, 19,855

wagons and 1,243 coaches were received during the last year of the plan.

7. The percentage of over-aged to total stock on line between the beginning and the end of the plan diminished appreciably on the metre gauge, but was higher for locomotives and wagons on the broad gauge, as will be seen from the following statement:—

Percentage of over-aged stock to total stock on line

	Locomotives		Wagons		Coaches	
	B.G.	M.G.	B.G.	M.G.	B.G.	M.G.
On March, 31 1951	23.0	31.0	13.3	29.4	24.5	45.0
On March 31, 1959	33.2	25.8	18.0	21.2	32.3	43.7

8. An Important development during the first plan was the progress achieved in the manufacture of rolling stock within the country. Between 1951-52 and 1955-56 indigenous production of wagons increased from 3,707 to 14,317, of locomotives from 27 to 179 and of coaches from 673 to 1,221. Against its original target for the plan period of 268 locomotives, the Chittaranjan Locomotive Works, which were completed in 1953 at a cost of about Rs. 15 crores, produced 341 and TELCO raised the production of metre gauge locomotives from 10 at the beginning of the plan to 50 in the closing year. The Integral Coach Factory at Perambur whose construction commenced in 1952 went into production in 1955. Machinery of the value of Rs. 16.45 crores was obtained for modernising and replacing over-aged machinery in the railway workshops. An expert committee has gone into the possibilities of developing indigenous manufacturing capacity and its recommendations are under examination. The Railway Board are considering in particular, the question of stepping up the installed capacity for manufacture of wagons from the present figure of 20,000 per annum to 36,000 per annum.

9. As a consequence of works undertaken during the plan for the renewal of obsolete track, the mileage under speed restrictions on account of the poor condition of the track was reduced during the period from 3,000 to 1,784. A major project begun at the end of 1953 and estimated to cost Rs. 15.6 crores is the construction of a rail-cum-road bridge over the Ganga near Mokameh in Bihar. By the end of the first plan an outlay of Rs. 6.65 crores had been incurred on this scheme. When completed in 1959 the bridge will be 6,074

ft. long, with a 22 feet wide roadway above and a modern transshipment yard on the north bank and will provide the long-needed rail link between north and south Bihar.

10. Over the years on several sections of the railway system the demand for traffic has greatly outstripped the available capacity. During the first plan, therefore, both long-term and short-term measures had to be undertaken to develop capacity. The programme included the lengthening of loops, provision of additional crossing stations, signalling improvements and the remodelling of marshalling yards. Among the sections in which substantial increases in capacity, were effected may be mentioned Madras-Bezwada, Raichur-Arkonam, Kharagpur-Waltair, Jhajha-Moghalsarai, Allahabad-Kanpur, Ratlam-Godhra, Manduadih-Chapra and Bhusaval-Surat. The sections between Ahmedabad and Kalol, Sini-Kandra, Sini-Gomharria and Joychandipahar-Burnpur were doubled. Transshipment facilities were substantially increased at Manduadih, Sawai Madhopur, Sabarmati, Viramgam, Ghorpuri, Guntakal, Bangalore and Arkonam and the major yards at Bezwada and Ratlam were re-modelled. Work was also begun on the electrification of the Howrah-Burdwan main line and the Tarakeshwar branch as also on the electrification of suburban services in the Calcutta area.

11. During the period of the plan 380 miles of new lines were constructed, 430 miles of lines dismantled during the war were restored and 46 miles of lines were converted from narrow gauge to metre gauge.

The more important among the new lines opened during the first plan period are listed below:—

Name of line	Gauge	Length in miles
Arantangi-Karaikudi	M.G.	17.07
Mukerian-Pathankot	B.G.	26.86
Gandhidham-Deesa	M.G.	170.04
Kastagram-Pariharpur	B.G.	16.97
Diggi-Toda Rai Singh	M.G.	27.73
Chunar-Robertsganj-Churk	B.G.	50.25
Gop-Katkola	M.G.	20.00

The following are the more important among the lines which were dismantled during the war and restored during the first plan period.

Name of line	Gauge	Length in miles
Bijnor-Chandpur-Siau	B.G.	21.89
Vasad-Kathana	B.G.	26.61
Unao-Modhoganj-Balamau	B.G.	62.06
Shoranur-Nilambur	B.G.	41.38
Nagrota-Joginderigar	N.G.	34.96
Bhagelpur-Mandar Hill	B.G.	31.10
Utrattia-Sultanpur-Zafraabad	B.G.	136.46
Madura-Bodinayakanur	M.G.	55.94

In addition the following narrow gauge lines were converted to metre gauge during the plan period.

Tezpur-Rengapara . . . . .	..	16.00
Adipur-Bhuj . . . . .	..	30.27

12. The period of the first plan was notable for the progress made in the provision of passenger amenities which had received insufficient attention for several years. Apart from the provision of new coaches equipped with fans and modern conveniences, 784 stations were provided with electricity, 1,120 with improved platforms, 393 with new waiting halls and 160 with new foot cover bridges and other improvements. Larger resources were devoted to housing for railway workers as the plan proceeded, and altogether about 40,000 quarters were constructed.

13. From a long-term aspect, one of the most important developments during the first five year plan was the attention given to improvement in operational efficiency, especially on the broad gauge system which accounts for about 80 per cent of the total goods traffic. The movement of the principal indices of efficiency may be seen from the following statement:—

Year	Wagon miles per wagon day		Engine miles per engine day in use		Net ton miles per wagon day.	
	B.G.	M.G.	B.G.	M.G.	B.G.	M.G.
1950-51	38.7	31.2	107	104	434	186
1951-52	40.9	32.4	109	104	463	198
1952-53	41.1	31.4	109	104	444	204
1953-54	40.1	28.4	112	103	441	194
1954-55	45.3	28.4	112	103	483	194
1955-56	46.3	28.5	111	103	541	203

Although high levels of performance were achieved in respect of wagon miles per wagon day and net ton miles per wagon day, much still remains to be done and the search for greater efficiency must be an intensive and ever-continuing process.

II. ROADS

14. At the beginning of the first five year plan India had 97,546 miles of metalled roads and about 151,000 miles of unmetalled roads. During the plan period about 24,000 miles of new surface roads and about 44,000 miles of low type roads were added. The provision for roads was raised by 23 per cent from about Rs. 110 to Rs. 135 crores during the period of the plan. The increase was spread over most of the States and as the plan proceeded, the Central Government also accepted a larger responsibility.

15. If the road development programme of the first five year plan is seen in perspective, at least five features seem to stand out

In the first place the road system in any State constitutes an integrated network, although in different degrees several different agencies contribute towards it, as for instance, the Central Government through the national highways and aided roads, the State Governments through their programmes of State highways, district boards and other local authorities with their district and local roads and, in increasing measure village communities undertaking the construction of village roads. The planning of roads under each of these systems has to be undertaken in every area in a coordinated manner.

Secondly, road programmes are influenced in a high degree both by economic as well as political and administrative considerations. Consequently, the problems of planning and of relative emphasis were not of the same character in different areas. Thus, at the beginning of the first five year plan the State of West Bengal consisted of three separate geographical blocks unconnected with one another and its age-old routes of trade and traffic had been disturbed. States like Madhya Bharat and Saurashtra, which comprised numerous small princely States, each almost a world unto itself, had to undertake new road programmes for achieving the minimum degree of administrative cohesion. In Pepsu, out of 5 district headquarters, two had no highway link with the capital of the State; out of 24 tehsil headquarters, 8 had no highway link with the district headquarters; out of 37 towns with a population of 5000 or more, 18 had no road communications to serve them. Many other areas had their own special problems. Thus, in NEFA there

were scarcely any communications with the interior or connections between the headquarters of different divisions. Some problems were common to different parts of the country, for instance, the supply of cement or of road rollers or of supervisory personnel. But these problems were far more acute in the less developed areas which had to face a number of handicaps. Their construction organisations were extremely inadequate and lack of experienced contractors as well as the supply of skilled and sometimes even of unskilled labour hampered progress, so that the greater the need of an area for roads, the more difficult it was for it to achieve the targets set under the plan.

In the third place, with the progress of national extension and community projects, local development works and shramdan throughout the country, village communities showed their readiness in a growing measure to construct village roads with voluntary labour. It became more and more necessary, therefore, to plan the network of village roads from a long-term point of view, linking it with the network of district roads and State highways and visualising in advance a phased programme for the improvement and metalling of rural roads.

Fourthly, in parts of the country floods and famine have exerted an important influence on the road programmes, the former through the upsetting of important construction schedules, the latter by compelling States to provide immediate employment by taking up the construction of roads outside the original scheme of development.

Finally, it has to be observed that several State Governments tended, for varying reasons, to take up road programmes outside the approved plans and sometimes at the sacrifice of approved programmes. From time to time their attention was drawn to departures from the schemes of the plan which thus occurred, and adjustments bringing in new works were effected. Such action on the part of any authority runs counter to the very idea of planning and may well have the effect of leaving numerous unfinished and inadequately connected lengths of road, much to the disadvantage of the majority of the people.

16. During the first five year plan provision in the Central Sector was made for three categories of roads, namely the national highway, roads described as 'other roads' and inter-State roads and roads of economic importance. The national highway network for which the Central Government are directly responsible consists of 13,800 miles and includes such important roads as the Grand Trunk Road from Calcutta to Amritsar, roads connecting Agra

and Bombay, Bombay, Bangalore and Madras, Madras and Calcutta, Calcutta, Nagpur and Bombay, Banaras, Nagpur, Hyderabad, Kurnool, Bangalore and Cape Comorin and a few other roads. On 1st April, 1947, when the Government of India assumed financial liability for the development and maintenance of roads provisionally classified as National Highways, there were long stretches of missing road links and many roads were without bridges at important points. Upto the commencement of the first plan period, 110 miles of missing road links and 3 major bridges were constructed and 1,000 miles of existing sections improved. At the beginning of the first plan period, the Central Government initiated a programme for the construction of 1,250 miles of missing links, and 75 major bridges and the improvement of 6,000 miles of existing roads. Out of these, during the plan period, the construction of 640 miles of missing links and 40 bridges and the improvement of 2,500 miles of existing roads were expected to be completed. By the end of the plan period, the works completed include the construction of 636 miles of missing links and 30 major bridges and the improvement of 4,000 miles of existing roads. Thus, while the target in respect of the construction of missing links was almost fully achieved, the work done on the improvement of existing sections of national highways was nearly twice as much as the programme originally envisaged. During the last year of the plan, work was completed on the construction of 196 miles of missing links and 5 major bridges and the improvement of 700 miles of existing roads. The total outlay on national highways during the plan period was Rs. 27.62 crores against a provision of Rs. 27.80 crores made in the plan. A sum of Rs. 9.80 crores was spent during the last year of the plan. Among the principal roads included in the 'Other Roads' programme of the Central Government mention may be made of the Assam-Agartala road and the Passi-Badarpur road, representing a total length of 217 miles, and the West Coast Road of which 25 miles were improved during the plan period. Towards the end of 1953-54, with a view to augmenting employment opportunities the Central Government agreed to finance a special programme of roads of inter-State or economic importance under which about 1,475 miles of new roads and 12 major bridges are expected to be constructed and 3,000 miles of existing roads improved. During the plan period, 125 miles of new roads were constructed and 500 miles of existing roads improved. In financial terms, an expenditure of Rs. 4.25 crores was incurred under the programme by the end of 1955-56. The programme would continue during the second plan period.

17. Roads in the States represent much the larger part of the road programme in the plan. It is roughly estimated that during

the first five year plan about 23,000 miles of surfaced roads and about 44,000 miles of low type roads were constructed in the States. A considerable amount of work was done on village roads in connection with the community development and the Local works programmes. The Statement in the Appendix to this chapter gives figures of road mileage added and total mileage achieved in each State by the end of the plan period. The road mileage that was expected to be achieved under the Nagpur Plan is also shown side by side. The Nagpur Plan had laid down as far back as 1943 certain broad objectives for road development in the country. The Plan envisaged that by 1963 no village in a well developed agricultural area should remain more than five miles from a main road. It will be seen from the Statement that the broad target of total road mileage under the Nagpur Plan was nearly achieved by the end of the first plan period; in fact in the case of some States the target was even exceeded. With the political integration of the country after partition, however, it became necessary to take a more comprehensive view of road development in the country with special reference to the former princely States. It is hoped that the development of communications particularly in the backward areas will receive still closer attention in the second plan period.

III. ROAD TRANSPORT

18. Road transport programmes have occupied a prominent place in the plans of several States during the past few years. State Governments began to interest themselves in proposals for the nationalisation of road transport soon after 1946. In the course of the first five year plan, at a total investment of about Rs. 12 crores, States have added 3000 vehicles to their fleets, bringing the total number of vehicles in the nationalised services to over 11,000. At the end of the plan about a quarter of the passenger services were in the nationalised sector. Goods transport, however, continued to be almost wholly in the private sector. During the period of the plan, taking the nationalised and the private sectors in road transport together, the number of stage carriages and trucks increased respectively by 23 and 26 per cent. At the end of 1954-55 the total number of stage carriages was about 42,000 and of trucks 105,000.

19. It began to be realised early in 1953 that progress in road transport was not commensurate with progress in the road system or with the growing transport needs of the economy. In consultation with the Ministry of Transport, the Planning Commission, therefore, set up a special group to study these problems. In the light of the investigation which was undertaken, the Planning Commission recommended that the nationalisation of goods transport services should not be taken up until the end of the second five year plan, and that

State Governments desiring to nationalise passenger services should proceed with caution, phasing the programme carefully over the second plan. It was also recommended that the licensing policy and procedures should be liberalised and the formation of larger units of private operators encouraged.

These suggestions were conveyed to State Governments in 1954 and have largely guided the formulation of programmes in the field of road transport for the second five year plan. They also influenced action in the closing period of the first five year plan. On the whole, however, it would be correct to say that over the greater part of the first plan, emphasis in the States was in favour of pushing on with the nationalisation of road transport services. Towards the close of the plan there was greater appreciation of the difficulties of private operators, and steps were taken in a number of States to ensure easier conditions for them.

IV. SHIPPING

20. At the beginning of the first five year plan India had a tonnage of 390,707 GRT consisting of 217,202 GRT on the coastal trade and 173,505 GRT on the overseas trade. The plan provided for an increase of 215,000 GRT, of which 105,000 GRT were to be on the coastal trade and 110,000 GRT on the overseas trade. Thus, according to the plan, the total tonnage should have reached 600,000 GRT. This was to be in addition to the provision for acquisition of ships to the extent of 60,000 GRT with a view to replacement of obsolete ships. At the end of the plan the total tonnage attained was 480,000 GRT consisting of about 240,000 GRT on the coastal trade and trade with adjacent countries and 240,000 GRT on the overseas trade. The plan had made a financial allocation of Rs. 18 crores for the development of shipping, but this amount was increased to Rs. 26.3 crores with the object of providing further loans to shipping companies to enable them to acquire tonnage for overseas trade. Commitments to the extent of full provision of Rs. 26.3 crores were finalised during the plan period; the expenditure incurred in the first plan was Rs. 18.71 crores. When the ships ordered during the plan period are delivered, the target of 600,000 GRT will be fulfilled. The tonnage for the coastal trade may, however, fall short of the original target owing to the diversion to the overseas trade of some of the ships which were originally intended for the coastal trade.

21. During the first plan the Central Government arranged for the training of 5,500 ratings, 143 marine engineer officers and 248 navigation officers. This was in fulfilment of the responsibility accepted by the Central Government for training personnel for the merchant navy. For this purpose the plan made a provision of Rs. 112 lakhs

for the establishment of a marine engineering college at Calcutta and for the ratings training scheme. The construction of the college was completed during the plan period.

V. PORTS AND HARBOURS

22. When the draft outline of the first five year plan was presented, no provision was made for the development of ports. The need for filling this lacuna was recognised and in the final version of the plan a provision of about Rs. 33 crores was made. This was later increased to Rs. 36.91 crores. Owing to the late start in the execution of port development programme, the expenditure incurred during the plan period, amounted to only Rs. 27.57 crores. Nevertheless, the programme undertaken was of great importance. Apart from the construction of the new major port at Kandla for which a provision of Rs. 12.1 crores was made, the main works in the programme were at Bombay and at Calcutta for which the plan provided about Rs. 11 and 8 crores respectively. At the end of the Plan, Rs. 8.5 crores had been spent at Kandla, Rs. 11 crores at Bombay and Rs. 3.5 crores in Calcutta.

23. Work on the construction of Kandla Port began in 1953. At the end of 1955-56, a berth for taking large oil tankers and a basin for lighters and sailing vessels had been completed, and landing stages for passengers and a jetty for mooring the floating dock were near completion. Work was also well advanced on the construction of four deep-water berths with three transit sheds and four double-storied warehouses. The port started handling oil traffic from April 1955 and the tidal basin for lighters and sailing vessels was opened to traffic in June 1955. The construction of Gandhidham township, a project associated with the Kandla Port, commenced in 1955 and at the end of the plan the total expenditure incurred was about Rs 41 lakhs.

24. The principal development programmes at the Bombay port were the Marine Oil Terminal Project, the electrification of cranes in the Alexandra Dock, the reconstruction of transit sheds in the Princess and Victoria Docks and the labour housing scheme. By the end of the plan period satisfactory progress had been made on programmes relating to the electrification of cranes and the reconstruction of transit sheds. The electrification of 4 portal cranes at the Ballard Pier and 24 semi-portal cranes at the Alexandra Docks was completed and the erection of the remaining 6 cranes at the Alexnadra Dock was in progress. At the Princess and Victoria Docks, 9 transit sheds were reconstructed, leaving 3 more to be reconstructed during the second plan. Under the labour housing scheme, out of 928 quarters, 368 were constructed. Progress on the

Marine Oil Terminal Project was also satisfactory. All the three berths at Butcher Islands were completed during the plan period. A start could not, however, be made on the minimum scheme for the development of the Princess and Victoria Docks.

25. The development programme drawn up by the Commissioners for the Port of Calcutta was intended to improve the port facilities which had suffered heavy wear and tear during the war and to equip the port for the increase in traffic expected from the rapid industrial development of the areas served by the port. On some parts of the programme adequate progress was made as, for instance on the development of the Sonai Yard into a central depot for the storage of Ores, the construction of a spur at Akra for training the river Hooghly and the improvement of the railway yard at the Kidderpore Docks. Steps were also taken to acquire machinery and equipment, including a suction dredger, dock tugs, heave-up boats and wagons and locomotives. Owing to the time taken in planning major engineering projects and the delays in the procurement of equipment such as crane dredgers, launches and tugs for most of which orders had to be placed abroad after drawing up detailed specifications and also delays in the supply of materials like steel, pipes, etc., certain parts of the programme could not be implemented as, for instance, the development of berths at King George's Dock.

26. At the Madras port work on the construction of the coal, ore and the passenger station jetties in connection with the first stage of the wet dock scheme was commenced during the plan period. By the end of 1955-56 works had been completed on two sidings and 6,200 feet of mixed gauge track on the site of the proposed marshalling yard. On account of difficulties in acquiring suitable land, progress on housing schemes was delayed.

27. At Cochin the construction of a coal berth and two warehouses and the oil tanker berth in the Ernakulam Channel was completed. More than half the work relating to the provision of bunkering facilities was also completed. The development of four additional berths in the Ernakulam Channel was taken in hand in the last year of the plan.

28. The total capacity of the major ports increased during the first five year plan from 20 million tons to 25 million tons. The total volume of traffic handled by the major ports in 1950-51 was 18.02 million tons consisting of 11.25 million tons of imports and 6.77 million tons of exports. The traffic handled in 1955-56 was estimated to be more than 22 million tons with imports at about 13 million tons and exports over 9 million tons. The major increases on the import side were recorded in mineral oils, and machinery

and iron and steel. The proportion of these commodities in the total imports increased substantially, reflecting the changing pattern of the country's economy. On the export side the cargo in mineral ores registered a substantial increase.

29. There are some 226 minor ports spread over a coastline of more than 2,900 miles. Of these about 150 are working ports. In 1951-52 these ports handled a cargo of 3.76 million tons and by 1954-55 the tonnage handled by them had increased to 4.15 million tons. The programme for the development of minor ports in the first five year plan included works at several ports, notably in Madras, Saurashtra, Bombay and Orissa. The total expenditure incurred was a little less than Rs. 2 crores. In Saurashtra the programme consisted mainly of provision of facilities at port terminals and replacement and modernisation of equipment at the ports. In Bombay surveys of some of the ports were completed and landing and wharfing facilities and amenities for passengers were provided. Satisfactory progress was also made on reconstruction of the Valiathura Pier in Travancore-Cochin. In Kutch development programmes were undertaken at Mandvi, Mindra, Jakhan and Kateshwar. In Orissa investigations were undertaken in connection with the development of Paradip Port.

30. A provision of Rs. 2 crores was made in the first plan for the development of lighthouses, but expenditure during the plan period is estimated to be about Rs. 59 lakhs. In all, 78 lighthouses were expected to have been constructed or improved during the plan period against the original target of 100.

VI INLAND WATER TRANSPORT

31. In the past, inland water transport played an important role in the transport system of India. It is estimated that about 5,000 miles of river routes in the country could be made navigable by modern power craft. At present 1,557 miles of rivers are navigable by mechanically propelled country vessels and 3,587 miles of river stretches are navigable by large country boats. Programmes were undertaken during the plan period for the development of navigation in shallow channels by using specially designed craft. An inter-State Board for the purpose of developing inland water transport in the Ganga-Brahmaputra region was set up during the plan period. The Board took up three experimental projects. Two of these were on the Upper Ganga and the feeder rivers of Assam and the third in Assam for a passenger and vehicular ferry vessel on the Brahmaputra. The specifications of the craft designed for the Upper Ganga Project were finalised and indents for the craft

were placed. The specifications of the craft for the other two projects were still being worked out at the close of the plan period. A grant of Rs. 25 lakhs was made to the Board for the purchase of equipment required for the pilot projects.

VII. CIVIL AIR TRANSPORT

32. As against a provision of about Rs. 13·4 crores for the development programme of the Civil Aviation Department, it is estimated that the expenditure incurred was Rs. 7·8 crores. A large part of the provision was intended for the works programme at aerodromes. The initial planning of works and the acquisition of land took considerable time. During the plan period, new aerodromes were constructed at Mangalore, Khowai, Kamalpur, Kailashahar, Belonia, Passighat, Shella, North Lakhimpur and Chandigarh, and the aerodromes at Kandla and Udaipur were nearly completed. New runways were constructed at Gauhati, Bagdogra, and the existing runways at Santa Cruz were extended and strengthened. Terminal buildings were constructed at Lucknow, Amritsar, Nagpur, Gauhati and Bagdogra. The terminal building at Santa Cruz was brought near completion. In addition, residential quarters were completed at a number of aerodromes including Dum Dum, Santa Cruz, Madras, Nagpur and Rajkot. Work was also completed on the construction of taxi tracks and aprons and hangars and the provision of ground lighting facilities. Progress on the provision of telecommunication facilities at the airports was slow on account of the time taken in the procurement of equipment. Progress on the schemes relating to education and training was also slow. Only two new flying clubs and 3 gliding centres were set up during the plan period as against the original intention to assist the establishment of 7 flying clubs and 10 gliding centres.

33. The air services were nationalised in the year 1953 and two air corporations, namely, the Air India International and the Indian Airlines Corporation started operations on the 1st August, 1953. These corporations have been engaged in consolidating their services and strengthening their organisation, besides undertaking expansion programmes. The Indian Airlines Corporation added 8 Herons and 3 Skymasters to its fleet and placed orders for 5 Viscounts which were to be delivered during the second plan period. The Air India International added 5 Super-Constellations to its fleet and placed orders for 3 more Super-Constellations for delivery during the second plan period. With these additions to their fleets, the Corporations were able to extend their operations over new routes and open up new services. The total route mileage (unduplicated) operated by the Indian Airlines Corporation increased

from 17,170 miles in August 1953, to 19,985 miles at the end of the first plan period. The services operated by the Air India International increased two fold after August 1953, and they covered a total route mileage of 23,483 at the end of the plan and reached out to 15 countries.

34. A provision of Rs. 9.5 crores was included in the plan for the development programmes of the two corporations. The actual expenditure on the programmes during the plan period was, however, larger, being of the order of Rs. 15.4 crores. This included over Rs. 9 crores for the purchase of aircraft. Some expenditure was incurred by the Corporations on modifications of their existing aircraft, the opening up of new offices, the renovation of existing offices and the purchase of surface transport.

VIII. COMMUNICATIONS

35. The plan contained a provision of Rs. 50 crores for the development of posts and telegraphs. Of this nearly Rs. 39.5 crores were spent during the plan period, expenditure in the year 1955-56 being estimated to be about Rs. 10 crores. Considerable progress was made on the schemes for automatisisation and expansion of the Calcutta, Bombay and Madras telephone exchanges. Progress on the manual exchanges was also satisfactory. In all, the installation of about 109,600 telephones, 350 trunk exchange positions and 45,000 telephone carrier channel miles of open wire routes was completed during the plan period. In addition, 916 public call offices were opened during this period. Progress on the laying of long distance trunk cables was slow on account of the time taken in finalising the schemes. The telegraph network was expanded during the plan period by the addition of 63,000 telegraph channel miles. At the commencement of the first five year plan, there were 36,000 post offices and 3,592 telegraph offices in the country. During the plan period, 18,900 post offices and 1465 telegraph offices were added. Progress on the construction of staff quarters and office buildings, however, was slow.

36. Moderate progress was made on the programme for the expansion of overseas communications services. As against the plan provision of Rs. 100 lakhs, a sum of Rs. 58 lakhs was spent during the plan period. During 1955-56 the expenditure incurred exceeded Rs. 14 lakhs, and direct radio-telegraph service was established with four countries and radio-photo service with two countries and radio-telephone service with four countries. The total number of countries connected with India by radio-telegraph, radio-telephone and radio-photo services increased to 14, 15 and 5 respectively. In addition, the overseas communications services

also provided multi-address broadcasts for Indian embassies and consular bodies abroad and newscast services for the press.

37. As against a provision of Rs. 62 lakhs for the development of the Meteorological Department, the expenditure incurred during the plan period was little over Rs. 47 lakhs, expenditure in 1955-56 being of the order of Rs. 12 lakhs. Steady progress was made on the construction of buildings and the procurement of equipment. New equipment was obtained for the Central Seismological Observatory at Shillong, for the Kodaikanal Observatory and for the workshops and laboratories of the Department. A number of skeleton hydromet organisations were also set up in the catchment areas of important rivers to collect data bearing on flood control projects. Progress on the construction of residential buildings at various aerodrome observatories was also satisfactory.

38. The plan contained a provision of Rs. 349 lakhs for the development of the Indian Telephone Industries. Expenditure during the plan period was of the order of Rs. 291 lakhs. Following a revision of the programme, the capacity of the factory was increased to 35,000 exchange lines and 50,000 telephones instruments per annum. In addition, the factory also manufactured carrier equipment of different types. The factory had begun by assembling telephone instruments from imported parts, but steady progress was made during the plan period in the manufacture of parts and by 1955-56 it was in a position to produce 520 out of 539 parts of the telephone instrument.

IX. BROADCASTING

39. During the first plan there was a considerable expansion of the broadcasting network. For development in broadcasting the plan provided Rs. 4.9 crores, the expenditure incurred being Rs. 2.67 crores. The shortfall in expenditure was due mainly to the delay in receipt of equipment and transmitters for which orders were placed during the plan period. The programme undertaken included the installation of three 100 K.W.s.w. transmitters, six 50 K.W.m.w. transmitters, eight 20 K.W.m.w. transmitters, two 20 K.W.s.w. transmitters and nine transmitters of lower power, in addition to the provision of studio and other facilities at several centres. In the course of the plan 50 K.W.m.w. transmitters were installed at Bombay, Ahmedabad, Jullundur, Calcutta, Lucknow and Bangalore and 20 K.W.m.w. transmitters at Indore, Ajmer and Madras, while at Patna, Vijayawada, Trichur and Delhi the installation of transmitters was nearly completed. Progress in the installation of 100 K.W.s.w. transmitters at Bombay and Madras was also satisfactory. At Nagpur and Gauhati 10 K.W.m.w. transmitters

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were installed. New broadcasting centres were opened during the plan period at Poona, Rajkot and Jaipur. Having regard to the nature of terrain and the needs of the region, a broadcasting centre with a 2.5 K.W.s.w. transmitter was opened at Simla and work was started on the installation of 10 K.W.s.w. transmitters at Gauhati and Srinagar. Considerable progress was made on the works relating to construction of multi-storeyed building at Delhi and at the permanent studio installations at Madras, Calcutta, Ahmedabad, Gauhati and Hyderabad. Facilities for rural listening were extended and about 14,000 community listening sets were installed in the course of the plan.

APPENDIX

Statement showing road mileage in States at the commencement of the First Five Year Plan and the mileage added during the Plan period

Sl. No.	States	Mileage at the commencement of the first five year plan			Mileage added during the first plan period			Mileage at the end of the first plan.			Mileage that should have been achieved under the Nagpur Plan.	
		Sur-faced	Unsur-faced	Total	Sur-faced	Unsur-faced	Total	Sur-faced	Unsur-faced	Total	Sur-faced	Unsur-faced
1	Andhra	.	.	.	Included in Madras			13187	4119	17306	Included in Madras	
2	Assam	.	.	.	1369	9999	11368	1481	14854	16335	3726	9901
3	Bihar	.	.	.	3315	29288	32603	4756	31844	36600	10051	26381
4	Bombay	.	.	.	12455	11366	23821	2136	1049	3185	11975	12204
5	Madhya Pradesh	.	.	.	6467	5594	12061	1816	695	2511	14572	24179
6	Madras	.	.	.	26592	12718	39310	4687	18092	28620	21597	25168
7	Orissa	.	.	.	2634	6022	8656	599	3233	8079	3226	7990
8	Punjab	.	.	.	2648	6611	9259	1020	3108	4138	13387	12216
9	Uttar Pradesh	.	.	.	10180	25285	35465	1492	9196	10688	3704	7590
10	West Bengal	.	.	.	3495	20209	23704	1235	1943	3178	46153	51302
11	Hyderabad	.	.	.	5406	1820	7226	576	833	1409	26882	16191
12	Jammu & Kashmir	.	.	.	696	548	1244	423	881	1304	8635	
13	Madhya Bharat	.	.	.	4015	234	4249	1018	441	1459	2548	
14	Mysore	.	.	.	6997	3008	10005	2839	1306	4145	5708	
								9836	4314	14150		

APPENDIX—Contd.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
15	Pepau	.	.	.	596	256	352	314	858	1172	910	1114	2024	
16	Rajasthan	.	.	.	3352	7418	10770	2006	4357	6363	5358	11775	17133	
17	Surashtra	.	.	.	1878	1445	3323	628	1076	1704	2506	2521	5027	
18	Travancore-Cochin	.	.	.	2486	3894	6380	518	557	1075	3004	4451	7455	
19	Ajmer	.	.	.	390	46	436	17	476	493	407	522	929	
20	Bhopal	.	.	.	425	486	911	231	1085	1316	656	1571	2227	
21	Coorg	.	.	.	336	50	386	206	2103	2309	542	2153	2695	
22	Delhi	.	.	.	263	6	269	47	140	187	310	146	456	
23	Himachal Pradesh	.	.	.	59	2933	2992	149	1055	1204	208	3988	4196	
24	Kutch	.	.	.	253	72	325	24	327	351	277	399	676	
25	Manipur	.	.	.	32	190	222	221	311	532	253	501	754	
26	Tripura	.	.	.	90	346	436	62	187	249	152	533	685	
27	Vindhya Pradesh	.	.	.	1117	1119	2236	254	707	961	1371	1826	3197	28000 37000 65000
28	Andaman & Nicobar Islands	.	.	.	...	...	...	...	...	...	...	...	...
29	NEFA	.	.	.	Included in Assam	...	...	...	...	...	...	...	...
					Included in Assam	...	...	...	...	...	...	...	...
										Included in Assam				
														12422* 17998* 30440*
	TOTAL	.	.	.	97546	150963	248509	21071	44088	68159	121617	195051	316668	123000 208000 331000

* These figures are estimates for future development on the account of the needs for roads resulting from the development of agriculture and industries in a period of 20 years from 1953 as then envisaged.

CHAPTER XII

EDUCATION

IN the First Five Year Plan an attempt was made to assess educational development up to about 1950. It was pointed out that only 40 per cent of the children in the age-group 6-11 years and 10 per cent in the age-group 11-17 years were attending school. There were disparities in the provision of educational facilities between different parts of the country, between different sections of the population and, in particular, between urban and rural areas. Considerable wastage occurred at various stages of the educational system. Facilities for technical and vocational education were altogether inadequate. The proportion of teachers without training exceeded 41 per cent in primary schools and 46 per cent in secondary schools. There was considerable shortage of women teachers. Scales of pay and conditions of service for teachers were generally unsatisfactory and were in part responsible for low teaching standards. The removal of deficiencies such as these will necessarily take time, but it may be said that during the first five year plan substantial beginnings have been made. There was a fair amount of expansion in educational facilities, and a number of steps were taken towards the consolidation and re-orientation of the system of education.

2. During the first five year plan the annual expenditure of the Central and State Governments on education increased from Rs. 65 crores in 1950-51 to Rs. 116 crores in 1955-56. During the same period development expenditure on education, as distinct from expenditure on the maintenance of institutions already established increased from less than Rs. 20 crores in 1950-51 and 1951-52 to about Rs. 47 crores in 1955-56. Expenditure on education from sources other than Government was estimated in 1955-56 to be about Rs. 71 crores compared to about Rs. 49 crores before the plan. During the plan period development expenditure on education at the Centre and in the States was as follows:

(Rs. crores)

	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1955-56 Revised	1951-56 Total	Original Plan	1951-56 after ad- justment
	1	2	3	4	5	6	7	8
Centre . .	2.4	3.0	3.2	9.9	13.1	31.6	35.0	44.0
States . .	17.4	19.4	23.4	27.4	33.7	121.3	116.7	125.6
TOTAL	19.8	22.4	26.6	37.3	46.8	152.9	151.7	169.6

11-14 in 1950-51 and 1955-56 in the various States as they existed before reorganisation.

State	Age-group 6-11		Age-group 11-14	
	1950-51	1955-56	1950-51	1955-56
	(Estimated)		(Estimated)	
Andhra	53.5	68.4	16.4	20.2
Assam	58.4	60.8	17.6	21.7
Bihar	29.8	34.0	8.4	9.9
Bombay	70.4	80.0	18.9	20.6
Madhya Pradesh	31.4	44.3	6.6	10.8
Madras	53.5	68.5	16.4	21.9
Orissa	25.5	33.6	5.3	6.9
Punjab	38.7	57.9	15.7	25.1
Uttar Pradesh	35.1	32.6	11.8	13.7
West Bengal	55.8	80.3	12.9	21.1
Hyderabad	24.9	34.5	5.5	10.6
Jammu & Kashmir	12.2	25.4	8.7	11.2
Madhya Bharat	25.3	44.4	7.3	11.7
Mysore	52.6	55.0	17.2	18.8
Pepsu	23.4	44.4	13.7	23.3
Rajasthan	15.1	22.4	5.0	8.3
Saurashtra	38.2	54.0	11.6	13.9
Travancore-Cochin	98.6	100.0	31.5	44.6
Ajmer	41.9	59.0	16.3	21.9
Bhopal	15.5	52.6	3.5	8.7
Coorg	61.5	95.7	27.8	45.9
Delhi	61.3	87.6	24.9	53.9
Himachal Pradesh	24.5	46.9	7.9	16.2
Kutch	23.1	41.0	9.3	14.3
Manipur	40.4	86.7	15.4	19.7
Tripura	27.8	60.8	13.4	20.2
Vindhya Pradesh	19.9	44.7	4.3	8.5
Pondicherry	34.6	50.3	15.7	21.8
NEFA	2.1	7.0	0.2	0.9
Andaman & Nicobar Islands	24.8	32.6	8.3	11.3
ALL INDIA	42.0	51.2	13.9	19.2

It will be seen that in both age-groups there was general increase in the number of pupils.

BASIC EDUCATION

6. Although the need to reorient elementary education along the lines of basic education was realised and accepted as a basis of policy several years ago, work in this field before the first five year plan had been limited to a few States and areas and was largely of an experimental and pioneering character. As a result of steps taken during the first plan, the development of basic education has become an integral part of the programme for improving elementary education and in different degrees almost all States have advanced in this direction. During the plan period the increase in the number of pupils, schools and institutions for training basic teachers was as follows:

	1950-51	1955-56
Pupils	185,000	1,100,000
Junior basic schools	1,400	10,926
Senior basic schools	351	1,529
Number of teachers training institutions	124	482

The Ministry of Education assisted States in trying out a comprehensive scheme for the expansion of basic education which included programmes for establishing new basic schools, converting existing primary schools into basic schools, introduction of crafts in schools, preparation of teaching materials and extension of facilities for training teachers for basic schools.

7. In consultation with States, 37 areas were selected for carrying out on basic lines programmes of intensive educational development which included the establishment of training colleges for graduate as well as under-graduate teachers in basic schools, community centres, Janata colleges (institutions for training rural leaders) and library services, as well as measures for improving existing primary schools. In all, under this programme the Central Government assisted in setting up 20 post-graduate and 28 under-graduate basic training colleges, 23 Janata colleges, 145 community centres and 28 library service units and in improving 1404 primary schools in the selected areas. In the last year of the Plan, the Ministry of Education established the National Institute for Research in Basic Education at Delhi. Attempts were made to bring all elementary schools, in which basic education could not be immediately introduced, nearer to the basic pattern by introducing in them such activities of basic schools as could be easily introduced with the facilities available.

8. Over the years, as work in basic education proceeded and experience was gained, it became possible to relate the initial thinking on the subject with the practical problems which arose in the development of basic education. Towards the end of the plan period, the Central Advisory Board of Education approved of an authoritative statement outlining the correct concept of basic education. This statement now guides further programmes in basic education.

SECONDARY EDUCATION

9. For many years secondary education has been generally regarded as being in some ways the weakest link in the system of education in India. Secondary schools supply teachers for elementary schools and students for higher institutions. The quality of secondary education is, therefore, decisive in determining standards at other stages of education. A good system of secondary education, which prepares the way for opening in many different direction, is essential to sound economic development. While piece-meal reforms were proposed and introduced from time to time the problems of secondary education as a whole were not considered in a comprehensive manner until the appointment of the Secondary Education Commission in 1952.

10. During the first five year plan the number of pupils in the age-group of 14-17 increased from 14.50 to 23.03 lakhs. Although this indicated an increase of about 59 per cent in the number of pupils, as a percentage of the total number in the age-group the increase was from 6.4 to 9.4 per cent only. The number of secondary schools increased by 47 per cent from 7288 to 10,695. This includes 334 multi-purpose schools, which are referred to later and 47 high schools which were upgraded to the higher secondary level.

11. The Secondary Education Commission drew pointed attention in its report to the shortcomings of the present system of secondary education. They considered that the traditional methods of teaching and the curricula followed did not train the whole personality of the pupil and excessive emphasis on the study of the English language led to comparative neglect of other important subjects. The Commission made recommendations for making the system of secondary education more broadbased, introducing greater diversity in the syllabus and preventing wastage. They envisaged that a period of 4 or 5 years of primary or junior basic education would be followed by three years in a middle or senior basic or junior secondary stage and a further period of four years in the higher secondary stage. After this secondary schooling of about 11 years till the age of 17, the first degree course could be of three years' duration. The Commission recommended the establishment of multi-purpose schools and of technical schools separately or as part of multi-purpose schools and the provision of facilities for agricultural education in

rural schools. Towards the end of 1954-55, the Ministry of Education sponsored a programme for establishing 500 multi-purpose schools, assisting 300 existing schools with better facilities for the teaching of science, providing libraries in 500 multi-purpose and 1,500 ordinary secondary schools and introducing the teaching of crafts in 2,000 middle schools along with the necessary supporting programmes for the training of teachers, organisation of seminars, etc.

12. It was not until the last year of the plan that the programme came into effective operation. During the plan period 470 multi-purpose schools were approved and 334 established. Programmes for improving the teaching of science were taken up in 214 schools, for improving existing teaching facilities in general in 1072 schools, for improving libraries in 1479 schools and for introducing crafts in 1199 schools. Training programmes for teachers were introduced in 13 colleges and 10 other centres. A Bureau of Text Book Research and a Bureau of Educational and Vocational Guidance were set up in the Ministry of Education and assistance for establishing a Guidance Bureau was given to the States of Assam, Bihar, Saurashtra, Madhya Pradesh, Bhopal and Orissa. Three vocational guidance centres were established in Madhya Bharat. Educational experiments and research projects in secondary education were taken up at a number of centres. An important project taken up in the last year of the plan was the establishment of extension departments at 24 post-graduate training colleges, the object being to provide training to teachers in-service through the organisation of seminars, work-shops, conferences, discussion groups, educational exhibitions, etc. Another useful project has been the organisation of seminars of headmasters of secondary schools, inspecting officers, teachers in training colleges, etc., for the discussion of common problems of objectives and methodology. These and other activities have been carried out under the guidance of the All India Council for Secondary Education which was set up with assistance made available by the Ford Foundation. With a view to improving teaching in training colleges and promoting research, 30 Research Projects were taken up in 21 Teachers' Training Institutions.

UNIVERSITY EDUCATION

13. The problems of reform and reorganisation of university education were considered carefully by the University Education Commission which reported in 1949. One of the principal recommendations of the Commission was that a committee or commission should be set up for allocating capital and recurring grants made by the Central Government to universities and taking steps, in

consultation with the universities, for the promotion and co-ordination of university education, determination and maintenance of standards of teaching, examinations and research. An *ad hoc* University Grants Commission began to function in 1954 and early in 1956 Parliament enacted the University Grants Commission Act, which set it up as a statutory body.

14. During the first five year plan the number of university students increased from 396,745 to about 720,000, the number of universities from 28 to 32 and the number of colleges from 695 to 965. The pressure for expanding college education, without making adequate provision for ensuring the quality of teaching has been widespread and persistent. This conflict between the urge for expansion and the need for quality has rendered more complex the task of reorganisation of university education.

15. The University Education Commission had devoted attention to the question of setting up rural universities, but specific schemes could not be evolved for giving practical shape to the proposal. Various suggestions on the subject were examined afresh by the Higher Rural Education Committee which reported in 1955. This Committee recommended the establishment of a series of Rural Institutes (as distinct from Rural Universities) which would provide facilities for higher studies to students who complete their post-basic or higher secondary courses in subjects such as rural hygiene, agriculture, rural engineering, extension etc. The Central Government have constituted a Council for Rural Higher Education and have selected 10 existing institutions for development along lines recommended by the Higher Rural Education Committee.

TECHNICAL AND VOCATIONAL EDUCATION

16. The need for expanding technical and vocational education was realised in the years following the second world war. In 1945 the All-India Council for Technical Education was set up for advising the Central and State Governments on the schemes of development in technical and vocational education. Early in 1947 the Scientific Manpower Committee was given the task of assessing the requirements of scientific and technical personnel in relation to the post-war development programmes which were then under consideration. A number of steps for increasing facilities in this field were taken before the first five year plan. These included the establishment of the Indian Institute of Technology at Kharagpur, selection of 14 technical training institutions for further development, the provision of research training scholarships and stipends for practical training and other schemes for the promotion of scientific and technical education and research. The results of the measures initiated in this period and those taken under the first plan are reflected in the increase in the

output of engineering and technological institutions during the period 1947-55:—

	1947	1950	1951	1952	1953	1954	1955
<i>A. Engineering—</i>							
(1) Degree level							
Institutions .	28	35	39	41	41	43	47
Intake . .	2,520	3,337	3,893	4,209	4,436	4,457	4,875
Output . .	950	1,700	2,163	2,426	2,286	2,602	3,395
(2) Diploma level							
Institutions .	41	61	64	65	66	70	88
Intake . .	3,150	5,350	5,485	5,786	6,550	7,619	9,418
Output . .	1,150	2,146	2,257	2,332	2,505	2,982	3,511
<i>B. Technology—</i>							
(1) Degree level							
Institutions .	16	25	24	27	27	27	28
Intake . .	420	782	895	975	1,014	1,011	879
Output . .	320	498	530	525	594	605	613
(2) Diploma level							
Institutions .	20	31	29	30	32	34	39
Intake . .	520	553	731	713	663	694	1,198
Output . .	290	332	369	323	242	415	561

Increase in admissions are reflected in increases in output after a period of three or four years. There is also a certain amount of wastage due to failures.

17. During the first five year plan the Central Government and the All-India Council of Technical Education completed a number of programmes begun earlier, and the total outlay on technological education was about Rs. 11.5 crores. This included an expenditure of about Rs. 4.2 crores on the Institute of Technology at Kharagpur, Rs. 78 lakhs on the development of the Indian Institute of Science, Bangalore, Rs. 1.9 crores for the development and expansion of 14 selected institutions, about Rs. 4 crores for the development of scientific and technical education and research and over Rs. 50 lakhs for scholarship schemes. By the end of the first plan, the Kharagpur institute had 1,250 students and 14 departments in various branches of engineering and technological studies. At the Indian Institute of Science, Bangalore, among the departments developed were those for aeronautical power, internal combustion and electrical communication engineering. Under the practical stipends scheme facilities were arranged in 160 private industrial undertakings and 4 public undertakings for 645 graduates and 277 diploma holders. Under the research scholarship training schemes, in 1955-56, 314

senior and 235 junior scholarships were awarded. A number of specialised courses for which facilities had not previously existed, were also organised during the first five year plan. These included courses for business administration and management at several centres, printing technology, architecture and town and country planning. Steps were also taken towards the establishment of the Administrative Staff College and the Institute of Management. Under the guidance of the All-India Council for Technical Education the requirements for development of 91 institutions were assessed and development programmes in 73 of these institutions were taken in hand. Hostel facilities at technical institutions were also expanded, a total expenditure of Rs. 1.60 crores being incurred for this purpose.

The number of technical and vocational schools rose from 109 in 1950-51 to 149 in 1955-56. A number of high schools in the Bombay State were converted into technical high schools.

SOCIAL EDUCATION AND LITERACY

18. Attempts to expand adult education during the past two or three decades came up against two sets of problems. On the one hand, there was somewhat excessive emphasis on literacy alone; on the other, the number of persons rendered literate were sometimes reported incorrectly and many of them lapsed into illiteracy. As a result of the experience gained, a wider concept of social education emerged, which included, besides literacy, health, recreation and home life, some knowledge of civics, training in simple crafts and citizenship training. This formed the basis of social education programmes during the first five year plan.

19. During the decade 1931-41 the proportion of population which was literate increased from 8.3 to 14.6 per cent. This rate of progress was not maintained in the following decade and the proportion of the population which was literate increased only to 16.6 per cent in 1951. If children up to 10 years of age are excluded, the literate population represented 9.1 per cent of the population in 1931, 17 per cent in 1941 and 20 per cent in 1951. In 1950-51 in two States literate persons accounted for more than 35 per cent of the population, in two others, for 25 to 35 per cent, in 12 for 15 to 25 per cent and in 11 for 6 to 15 per cent. It is roughly estimated that in the course of the first five year plan excluding the age group up to 10 years, the proportion of literates increased from 20 to 25 per cent. As is well known, there is a marked disproportion in literacy as between men and women and as between rural and urban areas. With the advent of the national extension and community projects programme, however, greater attention is being given to the advance of social education and literacy in rural areas.

20. The social education programme followed in the first five year plan included, besides literacy centres, the setting up of community centres, libraries and janata colleges. During the plan period nearly Rs. 5 crores were spent on social education. A National Fundamental Education Centre for research and training of higher personnel in the field of social education was set up towards the end of the plan and departments of social education in a number of States were strengthened.

TEACHERS

21. The number of teachers in elementary schools increased from 685,000 in 1950-51 to 932,000 in 1955-56, the corresponding increase in the number of secondary school teachers being from 58,000 to 92,000. During the plan the number of trained primary school teachers rose from 59 to 64 per cent and of trained secondary school teachers from 54 to 56 per cent. The annual enrolment of teachers in training schools increased from 70,063 to 91,530 and in training colleges from 5,585 to 12,000. The number of training colleges rose from 53 to 102 and of training schools from 782 to 915. Thus, at the end of the plan in spite of the expansion of training facilities, there was still much leeway to be made up.

22. The question of improving the pay and conditions of service of teachers has been in recent years an important aspect of the reorganisation and improvement of the system of education. Although limitations of resources were recognised, it was hoped that States would be able to give more attention to the revision of pay scales of teachers. In a number of States scales of salaries of primary school teachers, secondary school teachers and of college teachers were revised, but it was recognised that much more remained to be done and towards the end of the plan the Central Government offered a small measure of assistance to the States for this purpose.

PROGRESS IN RURAL AREAS

23. There has been some progress in the direction of increasing educational facilities in rural areas relatively to those available in urban areas. In the field of school education, the total number of institutions is estimated to have increased by 29.3 per cent from 232,000 to 300,000, while the number of institutions located in rural areas is estimated to have increased by 34.9 per cent, from 189,000 to 255,000. At the beginning of the plan, rural areas had 84 per cent of primary and junior basic schools, 77 per cent of middle and senior basic and 39 per cent of high schools. It is reckoned that by the end

of the plan these proportions had risen to 90.77 and 44 per cent respectively. The following statement gives an estimate of the distribution of schools in rural areas as between villages in different population categories:

	Total Number of villages	Number of villages with schools
Villages with:		
Population below 500	3,85,550	1,68,550
Population between 500 and 2000	1,57,532	1,21,582
Population between 2000 and 5000	29,595	20,241
Population over 5000	4,577	4,564
	<hr/> 5,77,304	<hr/> 3,14,937

GIRLS' EDUCATION

24. There has also been some progress during the first five year plan, in respect of girls' education. In 1950-51, girls accounted for 26.7 per cent of the total number of pupils in primary and middle classes, for 13.9 per cent in high and higher secondary classes and for 12.4 per cent in colleges and universities. By 1954-55, these proportions had risen to 28.2, 16 and 13.6 per cent respectively. During this period the total number of girls in educational institutions increased from 6.1 to 8.1 million. The greater part of this increase was secured through the advance of co-education, the number of institutions reserved for women having risen during the period from 16,814 to 18,617.

EDUCATION OF HANDICAPPED PERSONS

25. A centre for the education of juvenile delinquents was established at Hazaribagh in Bihar. Schemes for the grant of scholarships for the blind, the deaf and other handicapped persons were introduced and assistance was given to a number of voluntary organisations working in this field of social welfare. An All-India Council was set up for supervising and guiding development of education for various groups of handicapped persons.

OTHER DEVELOPMENT SCHEMES

26. Expansion of educational facilities in rural and urban areas was one of the programmes adopted in 1953 to relieve educated unemployment. About 80,000 additional teachers were appointed in new and existing rural schools, 19,521 in 1953-54, 35,675 in 1954-55 and 24,804 in 1955-56. A smaller measure of success attended the proposal to assist the establishment of social education centres in

urban areas, the numbers established being 1,749 as against the initial target of 8,000. The total expenditure on the programme was about Rs. 7.8 crores.

27. Under the First Five Year Plan a sum of Rs. 1 crore was provided for labour service and social work by students with the object of enabling them both to learn new attitudes towards labour and to participate in tasks of national reconstruction. About Rs. 74 lakhs were utilised for labour service camps and about Rs. 25 lakhs for activities within the college or university campus which might be of direct interest to students such as the construction of swimming pools, open air theatres, auditorium-cum recreation halls, etc. There was also considerable increase in student camps organised by the National Cadet Corps and the Auxiliary Cadet Corps, State Governments, the Bharat Sevak Samaj and other voluntary organisations. Thus, during the last year of the plan 958 student camps were held and as many as 1,12,062 students participated in them.

28. For several years the Central and State Governments have devoted increasing resources to the grant of scholarships, student-ships etc., for students from scheduled tribes, scheduled castes and other backward classes. From an average provision of less than Rs. 20 lakhs at the beginning of the plan, the provision made by the Ministry of Education in the closing years exceeded Rs. 1 crore. The number of students assisted increased from about 3,000 to about 31,000 per year.

29. To assist the fulfilment of the Directive of the Constitution for the replacement of English by Hindi over a period of 15 years, steps were taken by the Ministry of Education for the development of Hindi terminology in different fields, publication of standard text books, preparation of dictionaries and grammar, and of books for non-Hindi speaking readers, and facilities for training Hindi teachers were expanded.

30. A number of institutions for encouraging and promoting activities in different cultural fields came into existence during the first five year plan. These include the Sangeet Natak Akadami (Academy of Dance, Drama and Music), the Lalit Kala Akadami (Academy of Arts), the Sahitya Akadami (Academy of Letters), the National Book Trust, the South India Book Trust and the National Gallery of Art. Work on the construction of the National Theatre, the National Museum and the National Central Library, also commenced before the end of the Plan.

31. Grants amounting to Rs. 23 lakhs were approved for voluntary organisations engaged in experimental and research work in the field of education.

CHAPTER XIII

SCIENTIFIC AND TECHNOLOGICAL RESEARCH

In the field of scientific and technological research the first five year plan was primarily a period in which facilities for research in existing institutions were expanded, new institutions built up and numbers of scientific personnel selected and placed in a position to develop new research programmes. These steps have paved the way for a co-ordinated research programme for the development of national resources between the national laboratories, universities and other institutions. Towards the end of the first year plan, a Panel of Scientists to advise and assist the Planning Commission in this task was set up.

NATIONAL LABORATORIES

2. During the first five year plan the Central Government incurred a total expenditure of Rs. 5.11 crores, of which Rs. 4.79 crores were devoted to the development of the national laboratories and other institutions under the Council of Scientific and Industrial Research. The steps taken to build up the series of national laboratories have been described fully in the reports of the Council of Scientific and Industrial Research. It will be sufficient here to refer briefly to a few leading features of the work undertaken by them during the first five year plan.

3. The National Physical Laboratory has been engaged in very interesting work on the emission of charged particles from heated surfaces and on properties of sound waves of very high frequency (ultrasonics). The laboratory is also doing work on the standardisation of testing procedures and properties of matter at very low temperatures.

4. The National Chemical Laboratory has been concerned with investigations of topical interest for the industry. Improvement in the properties of natural rubber treated with chlorine has been one of the main subjects of investigation at the laboratory. A synthetic resin, polystyrene, is a very important basic material for plastic goods now very popular in this country. A method has been developed for preparing this plastic polymer in liquid suspension of styrene. A process for the manufacture of ammonium phosphate fertilizer using trisodium phosphate, an indigenous raw material and a by-product from the Indian Rare Earths Factory, Alwaye, has been

worked out. This process dispenses with the use of sulphuric acid. A rapid method of finding the permeability of paints and varnish films to water was developed through the use of radio-active isotopes.

5. The National Metallurgical Laboratory, the Fuel Research Institute and the Central Glass and Ceramic Research Institute have taken an active share in the programme of mineral development. The National Metallurgical Laboratory has carried out work on upgrading the quality, by specially developed physico-chemical processes (benefication) of (i) chromite ores from Orissa and Mysore (ii) laterite iron ore from Rajhara Pahar (Madhya Pradesh), (iii) low-grade uranium ore from Rajdah and from Khandela (Rajasthan) and (iv) low-grade manganese ore available in Madhya Pradesh and Orissa. The laboratory has also done work on the development of stainless steels, finding a substitute for tin in bronze bearings employed by the Indian Railways and on the production of refractories and titanium from indigenous sources.

6. The Fuel Research Institute has been engaged in a detailed physical and chemical survey of coals found in the country. Work has been done on the blending of non-coking and coking coals to be utilized in making high-grade metallurgical cokes for the iron smelting industry. The institute has also shown that Indian coals containing high percentage of ash can be improved by washing and based on these results washeries are being set up in several coal fields which will provide coking coal for the steel plants under construction.

7. The Indian Central Glass and Ceramic Research Institute has given attention to the study of properties of clay, sand and other raw materials required for glass, pottery and porcelain industries. Indian raw materials are being made suitable for better class of glass and ceramic wares, by improving their quality through development of cheap methods of separating the impurities. Red bangle so popular in India had up till now selenium as an essential colouring material. The Institute has developed a process whereby selenium which has to be imported from abroad can be replaced by copper.

8. At the Central Food Technological Research Institute, Mysore, studies on a baby food prepared from buffalo's milk have been continued. A multi-purpose food prepared from especially processed groundnut flour has been developed. Work on the preservation and storage of fruits and vegetables has also been in progress.

9. The Central Leather Research Institute has been engaged in the study, amongst other problems, of (a) causes and methods of preventing deterioration of Indian raw hides and skins, (b) process

for improving the quality of leather, and (c) production of new vegetable and synthetic tanning materials. Processes have also been worked out for the rapid tanning of sole leather of good quality thereby reducing the period of tanning from 3 to 4 months to 3 to 4 weeks and also reducing the cost.

10. The Central Electro-Chemical Research Institute has carried out successful investigations on the utilisation of the char from lignite reserves which have been located at Neyveli for producing high-grade calcium carbide. Methods have been standardized for the preparation of several aluminium compounds which are used in the combined chrome tanning of leather and the water-proofing of textile goods. Laboratory scale work on the preparation of sodium hydro-sulphite and titanium sponge has also been done.

11. Research on the properties of materials used in road construction and the behaviour of different types of roads under varying traffic conditions, has been undertaken at the Central Road Research Institute. The use of stabilised soil is being developed in the construction of major and minor roads.

12. Improvements in the quality of building materials and reduction in their costs have been among the principal items of research at the Central Building Research Institute. Extensive work has also been carried out on improvements in existing construction methods and on the performance of buildings.

13. The Central Drug Research Institute has undertaken investigations for determining the main constituents of medicinal plants grown in the country. A large number of amoebicidal, antilarial, and anti-mycobacterial agents have been synthesised.

14. The Central Salt Research Institute has been engaged in the preparation of salt of high purity, removal of pink colouring matter from salt bitterns and separation of sodium sulphate from its mechanical mixture with sodium chloride.

15. In the National Botanical Gardens, Lucknow, special attention was devoted to medicinal and essential oil-bearing plants.

16. The Council of Scientific and Industrial Research supported financially a large number of research projects at various university centres throughout the country. These covered a wide range of subjects, such as research in high altitude, atmospheric, radio, chemistry, leather, bio-chemistry, salts, vanaspati, cellulose, pharmaceuticals and drugs, fuel, internal combustion engines, metals, mining, roads, etc.

BOTANICAL AND ZOOLOGICAL SURVEYS OF INDIA

17. A report for the expansion and reorganisation of the Botanical Survey of India was submitted in July 1953. During 1954 a Central Botanical Laboratory was established at Lucknow, and the establishment of the Chief Botanist at Calcutta was strengthened. The industrial section of the Botanical Survey of India was reorganised and given the name of Botanical Museum. Three regional centres were set up at Shillong, Poona and Coimbatore and it was proposed to set up a fourth centre at Dehra Dun. In November, 1954 a scheme for the reorganisation and expansion of the Zoological Survey of India was approved. The Survey was equipped suitably and sent out several field parties to different parts of the country for collecting specimens. A temporary field station was opened in Kashmir in order to survey the aquatic fauna of the valley. Another party carried out a faunistic survey of the Spiti area in the Himalayas.

18. National Research Development Corporation was registered in December, 1953 to secure the maximum practical utilisation of researches in existing as well as new industries. With a view to developing the inventions held by it the Corporation arranges for trials in co-operation with industry and licenses them to industrialists for large-scale production. In all 177 inventions were reported for development during the first plan by various research organisations. The Corporation has also taken up the work relating to the patenting of inventions from research institutions which are administered by the Central Government.

RESEARCH INSTITUTES AND ASSOCIATIONS

19. A number of research institutes and scientific associations received assistance during the first plan for developing their activities. This included the Institute of Nuclear Physics, Calcutta, Bose Research Institute, Calcutta, the Indian Academy of Sciences Laboratory, Bangalore, Birbal Sahni Institute of Paleo-Botany, Lucknow, and the Indian Association for the Cultivation of Science Laboratory at Calcutta. The research activities of the Bose Institute have included such problems as cosmic rays, neutron-generator and application of radio-active tracer technique to the study of plant nutrition. At the Indian Academy of Sciences, Bangalore, the main aim is to discover and establish the principles which connect the atomic structure of various materials with their physical properties. The main work of the Institute of Paleo-Botany consists of investigations on macro and micro fossil flora. Paleo-botanical investigations pertaining to coal resources and work on the age determination of rocks are also being done. Problems investigated in the laboratory of the Indian Association for the Cultivation of Science

at Calcutta include investigation on magneto-chemistry, generation of low temperatures and protein-detergent complexes.

20. Among associations engaged in disseminating scientific knowledge may be mentioned the Indian Science Congress Association, the National Institute of Sciences, New Delhi and the Indian Academy of Sciences, Bangalore. These associations publish academic journals and provide forums for scientific thought and discussion. Similar work is undertaken by associations representing different branches of modern science such as the Indian Physical Society and the Indian Chemical Society. Grants were made to many of these organisations either directly by Government or through the National Institute of Sciences to enable them to develop their activities.

RESEARCH IN UNIVERSITIES

21. Science and technological departments in universities have been assisted during the first five year plan by the Ministry of Education and the University Grants Commission in equipping their laboratories and libraries and in their building programmes and by the Council of Scientific and Industrial Research, the Indian Council of Agricultural Research and similar bodies in specific research programmes and projects. Valuable work is being done at different university centres in diverse fields of science and schools of research are being developed at some of the universities in certain special subjects. Mention may be made of research on the chemistry and technology of dyes at the University of Bombay. As a result of successful laboratory and pilot plant investigations there, manufacture of several dyestuffs has been undertaken in indigenous factories. At the University of Calcutta intensive work is being carried out on problems of bio-chemistry and nuclear physics, ionosphere and the utilisation of blast furnace slag for manufacture of cement. The Nagpur University has sponsored research programmes on vitamins, anti-diabetic substances from plants, purification of bauxite and preparation of aluminium. The University of Travancore has sponsored research projects concerned with the utilisation of the deposits of heavy minerals on the coastal shelf. At the Utkal University investigations on the use of hormones for obtaining high yields of cereals and on the distribution of trace elements in important minerals from Orissa have been undertaken. At the Jadavpur University, Calcutta, research on the production of elemental sulphur from natural metal sulphides and on the production of copper from its ores has been in progress. A school of research on X-ray and crystal structure has developed at the University of Allahabad and active research schools in botany, physics and chemistry at Delhi University have won wide recognition. The Gujarat University has sponsored schemes of research on crops, fertilizers, animal nutrition

and dairy science. The Andhra University has undertaken surveys and studies on reserves of monazite, ilmenite, natural gas, lignite, iron ores, etc. Investigations on soil and manures and production of fuel gas are some of the activities at the University of Poona.

INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR

22. The Institute has undertaken the development of a boiler furnace suitable for utilising low grade solid fuels available in India. Research work on the movement of machine parts such as gears was actively pursued. Determination of the hardness of different alloy steels and investigation of causes of failure of engineering metals were undertaken. At the Ship Model Tank Laboratory, three models were tested at varying depths of water. These tests were undertaken on a commercial basis on behalf of the North Eastern Railway. The economics and the technical problems involved in adapting a suitable single-wire system for rural electrification were investigated.

The Institute has also taken up the study of foundations of structures built in areas of clay soil, the efficient utilisation of steel in girders and frames and the mechanical properties of cement and reinforced concrete slabs. An active school of research on gas reactions at high pressures of industrial significance has been created.

INDIAN INSTITUTE OF SCIENCE, BANGALORE

23. Among the various problems investigated, the following may be mentioned:

In the field of Aeronautics the most important activity has been the construction of several new wind tunnels in which it would be possible to carry out investigations on problems associated with the movement of solid particles through air with a velocity approaching or even exceeding that of sound. In addition, several important problems relating to the failure of aircraft materials and structures have been tackled. As regards internal combustion engines, considerable advances have been made towards the evolution of a reliable fuel injection system suitable for working in a small diesel engine.

Aluminium alloys for replacing copper which is a scarce metal in the electrical industry are being developed. From its mineral ore, zircon of high purity has been extracted. Successful investigations on micro-waves have been carried out.

An experimental electronic telephone exchange has been set up. The Institute has been engaged in the development of efficient lightning arresters and in the study of the behaviour of different varieties of porcelain insulators.

24. Useful work has been done at the specialised research institutes associated with individual industries such as the Ahmedabad Textile Industries Research Association (ATIRA), the Indian Jute Mills Association Research Institute and the Silk and Art Silk Mills Research Association.

The Jute Laboratories have done work on bleaching, dyeing, printing, and softening of jute. A wide range of rot-resistant finishes which can be applied to jute goods have also been developed. Researches of these laboratories have also shown that jute fabrics can be successfully employed in the manufacture of numerous types of laminated products and also for yielding materials which are suitable for roofing and road surfacing. Work on woolenisation of jute has also been undertaken.

DEPARTMENT OF ATOMIC ENERGY

25. Production of electric power from nuclear energy and the application of nuclear science in agriculture, industry, medicine and health are the main aims in the field of atomic energy development. The Atomic Energy Commission was set up in 1948 and the Department of Atomic Energy in 1954. In 1955 work on the atomic energy establishment was begun at Trombay. The establishment consists of three main divisions for physics, chemistry and engineering research. In addition to housing its laboratories and its research and proto-type reactors, the establishment will also have facilities for pilot plant experiments. Among the basic materials required for atomic energy work are uranium, thorium, heavy water, graphite, zirconium and beryl. The geological and geo-physical survey and prospecting for minerals in connection with the work of the department is carried out by the raw materials division. Several new occurrences of radioactive minerals have been located. The department's industrial projects which are being developed with a view to enabling the country to meet all her needs of the materials mentioned above include the production and purification of uranium and the production of heavy water. The monazite processing plant at Alwaye which began production in 1952 has doubled its capacity to 3000 tons of monazite per year. The thorium-uranium plant at Trombay processes the residual thorium-uranium cake extracted in the Alwaye plant and produces thorium nitrate and uranium. A small plant to turn this uranium into uranium rods of atomic purity for insertion in a reactor is being designed.

26. The first research reactor in India—the swimming pool reactor at Trombay—came into operation soon after the end of the first plan in August, 1956. It is being used for experiments in physics, for making radio-isotopes and for training personnel for further work. Work is also progressing on the setting up of a high

power high flux (heavy water moderated, natural uranium) reactor of the Canadian NRX type which is planned to come into operation in 1958.

RESEARCH IN INDIAN RAILWAYS

27. Research work on railways has been undertaken in the Central Standards Office for Railways, and the railway testing and research centres at Lucknow, Lonavala and Chittaranjan. Steps have also been taken to make the country self-sufficient in railway equipment as far as possible.

There are three distinct stages in the work relating to railways; namely: design of equipment, testing under working conditions and standardisation. The Central Standards Office for Railways continued its work on standardisation of rolling stock, track, bridges and other structures and equipment such as signalling and interlocking devices used on railways. The testing and research centre at Lucknow carried out research on the dynamic effects of vehicles on the track and bridges and riding quality and performance tests on locomotives and rolling stock assemblies and components.

The centre at Lonavala has studied problems relating to buildings, foundation engineering, soil mechanics and cement concrete as applicable to railways. The centre at Chittaranjan has undertaken inspection of components manufactured at the Locomotive Works and chemical and metallurgical studies on paints, water softeners, lubricants, bronzes, metals and metal processing. A Railway Research Controlling Committee has been formed to advise on the programmes of research and to review its progress. A documentation and information service has also been established.

TELECOMMUNICATION RESEARCH

28. Many research problems of great practical importance have been undertaken and completed during 1951—56 at different centres, such as: the All India Radio, the P. & T. Department, the Department of Atomic Energy, the Defence Science Organisation, the Civil Aviation Department, the Indian Institute of Science, the Indian Institute of Technology, the Department of Radio-Physics and Electronics at Calcutta, the National Physical Laboratory and various engineering colleges. Of these, mention may be made of the development of a high-speed electronic computer which is useful for solving complex mathematical problems, study of atmospheric and electrical interference to radio reception, propagation of microwaves on a single wire, circular aerials, standardisation of aerials for aeronautical communication services, study of the efficiencies of loud speaker systems and acoustical measurements in broadcasting studios.

The Research Department of A.I.R. has been organised to undertake investigations in ionospheric, acoustic and high frequency branches of radio-engineering that would improve the quality of the broadcasting service in the country. Work on the establishment of an Electronic Research Institute at Pilani was started. The A.I.R. Research Department has developed an equipment for measuring soil conductivity which is very useful for the selection of sites for the installation of medium wave transmitters. A prototype of community radio receiver was designed and constructed. Experiments were carried out to determine the effect of earth's magnetic field on the propagation of medium-wave signals through the ionosphere.

In the P. & T. Department, a 12-channel open-wire carrier system which provides twelve circuits over a pair of wires was first installed between Calcutta & Patna in 1951 and later on installed over five other routes. Work on 14 more routes is in progress. Considerable attention has been paid to the problem of making the open-wire lines suitable for the parallel operation of a number of such systems and certain designs have been evolved.

METEOROLOGICAL RESEARCH

29. One of the most important developments which was undertaken during the First Five Year Plan was the modernisation of the observational equipment of the department, particularly at the aerodrome observatories. A network of 9 Radiowind stations equipped with Radio-theodolites was set up for the measurement of upper winds up to very high levels in the atmosphere by using radio methods. These methods, unlike the older methods involving the use of optical theodolites, permit of observations above cloud levels and even in rainy and foggy weather. A storm detecting radar was installed at Dum Dum Airport (Calcutta) for detection of local storms like Nor'wester, and a Ceilometer was set up at Santa Cruz Airport (Bombay) for automatic recording of the base of low clouds over the station both by day and night. An atmospheric direction finding equipment for the location of thunderstorm centres was set up at New Delhi, while a Centimetre radar set for radar study of precipitation areas was set up at New Delhi.

The laboratories and workshops of the department were equipped with new machineries for the design, testing and repair of various types of instruments required by the department. These additional equipments include a Deep Freeze Cabinet for the laboratories at Poona for the calibration of radiosonde instruments upto very low temperatures which are encountered by these instruments at high altitudes.

A multi-purpose scheme for the improvement of the meteorological organization in Assam, Manipur and in Tripura to meet the increasing needs of that region for weather services for various purposes was implemented, which included the opening of three Weather Forecasting Offices and a number of other smaller meteorological offices and observatories. The forecasting and observational organisation in other parts of the country was also strengthened by the addition of a forecasting office at Bombay (Colaba) and a large number of reporting meteorological observatories.

Developments in the field of Geophysics during the period include the establishment of the Central Seismological Observatory at Shillong as recommended by different Expert Committees. A Vertical Seismometer, the first of its kind in India, was also obtained from out of the funds allotted under the Plan and installed at that Observatory. New seismological observatories were started at Dehra Dun and Bokaro (in the Damodar Catchment area).

An ionospheric section was attached to the Kodaikanal Observatory, which specialises in the study of solar physics and solar and geomagnetic relationships, by installing an automatic Ionospheric Field Intensity Recorder. Two radio-telescopes, by which wireless waves from extra-terrestrial sources such as the sun and stars are recorded, were installed at this Observatory. Also, a 20-inch reflecting telescope was set up for starting work on the physics of the stars. In addition, improved types of magnetographs were provided for the magnetic section of the Observatory while some modern machineries were added to the workshop of the Observatory.

A new line of work which was undertaken by the department was the collection of hydrometeorological data from a network of observatories in connection with Flood Control Projects as well as for the various river valley projects. A scheme for the establishment of hydrometeorological observatories in the Himalayan region where practically no observations were available, was taken up in connection with the Flood Control Projects towards the end of the plan period. Under this scheme about 80 observatories were proposed to be set up in Nepal, Bhutan, Sikkim and Garhwal-Himalayas, of which 20 observatories were established by the end of 1955-56.

CHAPTER XIV

HEALTH

In the main, health programmes are the responsibility of State Governments, but during the first five year plan in a number of directions the Central Government took initiative and supported new programmes, as, for example, malaria control, filaria control, family planning and others. While new hospitals, dispensaries, health units and maternity and child health centres were opened during the plan period, the principal developments in the expansion of health services related to such fields as water supply and sanitation, control of communicable diseases and expansion of training facilities.

2. The following statement shows the progress of expenditure on health schemes:

(Rs. lakhs)							
	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Actuals	1955-56 Revised	1951-56 Col. 5+6
	1	2	3	4	5	6	7
Centre . . .	12.3	16.3	239.1	532.9	800.6	582.6	1383.2
States . . .	1159.5	1308.3	1410.8	1754.2	5632.8	3079.5	8712.3
TOTAL . . .	1171.8	1324.6	1649.9	2287.1	6433.4	3662.1	10095.5

It will be seen that the total expenditure on health rose from Rs. 11.7 crores in the first year of the plan to about Rs. 36.6 crores in the last year. The total outlay during the plan was about Rs. 101 crores. In 1951 there were about 8600 hospitals, dispensaries and other medical institutions in the country with about 113,000 beds. In the last year of the plan there were 10,000 institutions and about 125,000 beds. Along with this may be mentioned the increase in maternity and child health centres. In 1950-51, there were 1651 such centres to which were added 201 centres in the course of the plan.

3. Following the recommendations of the Health Survey and Development Committee which reported in 1946, early in the plan period a pattern for primary health centres was worked out. These health centres are intended to serve as focal points for the development of curative and preventive health services in rural areas. They are an item in the programme in community development blocks and are financed under the community development programme. In addition, in selected national extension service blocks funds were provided by the Central Ministry of Health. In all, during the first plan 725 primary health centres were established. It is expected that in due course activities under specialised programmes such as malaria, leprosy, tuberculosis as well as maternity and child welfare will be integrated with the work of the primary health centres. Training facilities for personnel for health centres were provided at three re-orientation training centres at Singur, Poonamalle and Najafgarh and up to March 1956 about 723 persons were trained.

WATER SUPPLY AND SANITATION

4. The provision of a safe and adequate water supply is a basic requirement in a country in which large number of persons become victims of water and filth borne diseases. At the beginning of the first five year plan 128 towns with population exceeding 50,000, 60 towns with populations between 30,000 and 50,000 and 210 towns with populations below 30,000 had protected water supply. It was estimated that only about 25 per cent of the urban population was served by protected water supply. About 45 million people in the towns lacked protected water supply and over 50 million were without sewage facilities.

5. In the First Five Year Plan Rs. 30 crores were provided in the plans of States for water supply and sanitation projects. Of this amount Rs. 14 crores were for rural areas and Rs. 16 crores for urban areas. To promote more rapid development of water supply and sanitation services, in 1954, the Central Government sponsored a water supply and sanitation programme on a national basis. For this purpose Rs. 12.72 crores as loans for urban water supply and sanitation schemes and Rs. 6 crores towards grants for rural schemes were made available. Upto March 1956, 196 urban water supply schemes and 58 drainage schemes were approved for execution in 17 different States and the expenditure incurred was about Rs. 8.3 crores. On the rural side 134 schemes were approved in 19 States and the expenditure incurred was Rs. 2.8 crores. The water supply and sanitation programme received assistance to the extent of about \$ 2.5 million in equipment and materials under the technical co-operation programme with the United States. Besides a late start, the programme was hampered in its implementation by lack of techni-

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cal personnel and difficulties in the supply of equipment. The majority of the schemes undertaken were only half way through when the plan drew to a close.

6. After the water supply and sanitation programme was sponsored, the Central Government set up a nucleus central public health engineering organisation in the office of the Director-General of Health Services for examining the schemes proposed by State Governments from the technical aspects. A programme such as this also called for the strengthening or creation of similar units in the States. Several States now have public health engineering organisations and have taken steps recently to provide additional personnel.

7. Some steps to expand training facilities in public health engineering were taken during the first five year plan. The All-India Institute of Hygiene and Public Health, Calcutta, the Roorkee Engineering University and the Guindy Engineering College provide a year's course leading to a master's degree in public health engineering. At the All-India Institute of Hygiene and Public Health each year orientation courses in rural water supply and sanitation for engineers for short periods of 3 months are also provided.

CONTROL OF COMMUNICABLE DISEASES

8. *Malaria*: Malaria has long been one of the major health problems in rural areas. Estimates of its incidence and the loss of working time caused by it vary. According to one estimate until recently there were as many as 57 million cases of malaria every year and 171 million work days were lost on account of sickness. A programme of malaria control on a national scale was adopted in 1952 with assistance under the Indo-U.S. technical co-operation programme. It was proposed to set up 162 malaria control units during the period of the plan—90 units in 1953-54, 46 in 1954-55 and 26 in 1955-56. The programme included indoor spraying of houses with D.D.T. with a view to interrupt the transmission of infection and also provided for the treatment of malaria cases to reduce the reservoir of infection. At the end of the plan period 133 malaria control units were functioning and areas with a population of 112 million persons had received protection. It is estimated that about 78 million houses were reached by spraying teams of the malaria control units and compared to 60 million cases in 1953-54, 41 million cases were reported in 1954-55 and 20 million in 1955-56. The follow-

ing table showing reductions in spleen rates and infant parasite rates illustrates the value of the malaria control programme:—

	1953-54	1954-55	1955-56
(a) <i>Children:</i>			
(1) Number of children examined . . .	702,294	2,105,102	2,503,712
(2) Number of children found positive . . .	114,042	262,348	191,768
(3) Percentage of (2) to (1) . . .	16.2	12.4	7.7
(4) Range of child spleen index . . .	0.02% to 56.1%	0.02% to 26.4%	0% to 23%
(b) <i>Infants:</i>			
(1) Number of infants examined . . .	16,975	47,680	60,692
(2) Number of infants found positive . . .	309	689	429
(3) Percentage of (2) to (1) . . .	1.8	1.4	0.7
(4) Range of infant parasite rates . . .	0% to 7.0%	..	0% to 0.1%

9. The total expenditure on the malaria control programme during the first five year plan was about Rs. 11 crores, of which the Centre found over Rs. 7 crores. The programme was guided and co-ordinated by the Malaria Institute of India, which distributed supplies and organised research and training in malaria control methods. During the plan period the Institute provided training in malariology to 80 medical officers, 427 malaria inspectors, 23 engineers and 13 entomologists.

10. *Filariasis:* Amongst mosquito borne diseases with considerable incidence, filariasis comes next to malaria. In varying degrees filariasis prevails in several States, notably in the east and the south. While accurate figures of its incidence are not available, it is estimated that about 25 million persons live in areas where filariasis is endemic. A filaria control programme was sponsored by the Central Government in 1954-55. The programme envisaged the training of personnel, setting up of demonstration projects for the control of the infection and surveys with a view to delimiting the problem. It was proposed to establish 13 control units and 22 survey units. By the end of the first five year plan 10 control units and 18 survey units were functioning. The control units completed the collection of precontrol survey data covering a population of about 3 million. Mass drug administration with Diethyl-carbamazine and anti-mosquito measures by larval control were taken up. The Malaria Institute of India established a filaria section and research in filariasis was also organised at the Institute in co-operation with the Indian Council of Medical Research. Two courses for medical officers and two for senior Inspectors were organised in 1955 and 39 officers and 38 Inspectors received training in filariology. The total expenditure during the plan period was Rs. 20.3 lakhs.

11. *Tuberculosis and B.C.G. Vaccination:* A number of general and special measures were undertaken during the first five year plan to combat tuberculosis. These included B.C.G. vaccination, establishment of clinics and domiciliary service, provision of beds for isolation, treatment of patients and after-care and the setting up of demonstration and training centres. B.C.G. vaccination began in India in a small way in 1948, but the programme soon assumed large proportions. The following statement shows the number of persons tested and vaccinated during the period of the plan:—

	Upto	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	Total
Tested (in lakhs)	.	34.05	39.73	86.61	130.60	215.48	209.53	716.00
Vaccinated (in lakhs)	.	11.81	11.71	27.10	42.20	74.52	78.66	246.00
Number of Teams working	.	..	15	48	85	119	131	131

Technical teams engaged in B.C.G. Vaccination at the end of the plan period included 140 doctors and 786 technicians.

12. The progress made during the first five year plan in establishing various T.B. institutions is shown below:—

	1950	1955
Sanatoria	49	69
T.B. Hospitals	35	55
Clinics	110	156
T.B. Wards	114	140
Beds	10,371	16,820

The personnel available for T.B. work expanded during the plan and by 1955 included 921 doctors, 770 nurses, 104 health visitors, 126 X-ray and laboratory technicians and 2,681 other personnel. T.B. centres were established at Delhi, Patna and Trivandrum for demonstrating tuberculosis control techniques and for training medical and auxiliary personnel. A 76-bed children's hospital and a thoracic surgery centre was constructed at Madnapalle in Andhra to serve as the principal training centre in tuberculosis for doctors and technicians from different parts of the country. At the tuberculosis hospital at Mehrauli near Delhi 100 additional beds and a special children's ward were added. The total expenditure during the plan on the control of tuberculosis was in the neighbourhood of about Rs. 3.5 crores.

13. *Leprosy*: The Central Government sponsored a programme for the control of leprosy and offered financial assistance to States for setting up centres for treatment, study, survey and research and subsidiary centres for the treatment and control of leprosy. In all 4 treatment and study centres and 29 subsidiary centres were established during the first plan. While the former were intended to provide for surveys of the type and intensity of leprosy prevalent in different areas and for the evaluation of results, the latter were to administer treatment on a mass scale and to carry out health education. The Central Government took over two leprosy institutions in Madras State with a view to setting up a central leprosy teaching and research institute for which provision had been made in the First Five Year Plan.

14. *Venereal diseases*: Shortly before the Plan commenced with assistance from the World Health Organisation and UNICEF extensive field surveys in venereal diseases were undertaken in Himachal Pradesh. 4 clinics were established and medical personnel from various parts of the country were given training in control methods and in the use of recent laboratory techniques. During the plan period 70 V.D. clinics were to be established; of these 50 were set up, and 17 received equipment from UNICEF. A plant for producing Antigen, which is used in the diagnosis of venereal diseases, came into production in 1954. Training centres were established in Delhi and at the Madras General Hospital. An expert committee for V.D. has been established under the Indian Council of Medical Research for advising on research problems, and arrangements have been made between various laboratories for exchange of samples and for testing and analyses of results.

INDIGENOUS AND OTHER SYSTEMS OF MEDICINE

15. The First Five Year Plan provided Rs. 37.5 lakhs for research in the indigenous system and in systems of medicine other than the modern. The programme included assistance for the Central Institute of Research in Indigenous Systems of Medicine at Jamnagar and also for research in the Ayurvedic, Unani, Homoeopathic and Nature Cure Systems. Schemes of research in these various systems were invited from State Governments. Grants amounting to Rs. 2.75 lakhs were sanctioned during the first five year plan for research in the Ayurvedic and Unani systems of medicine. The Institute at Jamnagar which was established in association with the Gulab Kunwarba Ayurvedic Institute has been engaged in clinical research on various diseases and during the first plan it has received assistance amounting to Rs. 8.6 lakhs. A post-graduate training centre in Ayurveda was also established at Jamnagar. A committee was appointed towards the end of the plan to study and report on the

question of establishment of uniform standards in respect of the education and the regulation of professional practice by vaid, hakims and homoeopaths.

MEDICAL EDUCATION AND RESEARCH

16. The training of health personnel had necessarily a high priority in the programme for developing health services, especially in view of the shortages which existed in relation to medical and auxiliary personnel. During the first five year plan the number of medical colleges increased from 30 to 42 and the number of annual admissions from about 2,500 to more than 3,500. The number of registered nurses, including auxiliary midwives, increased from 17,000 to 23,971, of midwives from 18,000 to 2,68,207 of health visitors from 600 to 810 and of nurse dais/dais from 4,000 to 6,826. The targets in these categories were respectively 22,000, 26,000, 800 and 6,000. The number of institutions training different classes of personnel increased in the case of nurses from 141 to 324, and in the case of midwives from 156 to 259. In the last year of the plan there were under training 2,030 nurse, 2,170 midwives, 2,070 dais and nurse dais and 600 auxiliary nurse mid-wives. To train health visitors, besides the Lady Reading Health School at Delhi, where 84 students were admitted, 8 other institutions were expanded. At the end of the plan there were 35 centres training a total of 600 candidates as auxiliary nurse-midwives.

17. The construction of the All-India Institute of Medical Sciences was taken up during the first five year plan. By the end of 1955-56 roads and essential services had been developed and about 200 staff quarters had been completed, with 98 under construction. The first batch of students were admitted to the first class of the Institute in August 1956. The project has been assisted by the Government of New Zealand under the Colombo Plan.

18. A scheme for the upgrading of selected departments of medical colleges and research institutions which was prepared some years ago has been implemented. The object of the scheme is to give post-graduate training to selected doctors to fit them for teaching and research work. With a view to providing post-graduate training to selected personnel, a number of departments in the existing medical colleges and research institutions were upgraded. These included—

1. Obstetrics and Gynaecology Department, Women and Children's Hospital, Madras.
2. V.D. Department, Government General Hospital, Madras.
3. Anatomy Department, Stanley Medical College, Madras.
4. Thoracic Surgery Unit, Christian Medical College, Vellore.

5. All India Institute of Mental Health, Bangalore.
6. Indian Cancer Research Centre, Bombay.
7. Vallabhai Patel Chest Institute, Delhi.

19. Shortly after 1947 the Indian Research Fund Association was converted into the Indian Council of Medical Research. The main tasks to which the Council has addressed itself are training in medical research, promotion of research in medical institutions, collaboration with the Ministry of Health and Health departments in the States in the solution of urgent health problems such as those relating to communicable diseases, nutrition, environmental sanitation and maternal and child health. About 150 fellowships have been given to junior teachers from medical colleges for training in medical research. Whereas 10 years ago medical research was undertaken in very few medical colleges, now most medical institutions receive assistance through the Council for research programmes. Work done under the aegis of the Council in the field of leprosy has contributed to an understanding of the mechanism of infection of leprosy and the studies undertaken have helped in the evolution of special operative procedures for correcting deformities which are so common in the later stages of leprosy. Nutritional problems have been given a high place in the Council's programmes. The work of the Nutrition Research Laboratories at Coonoor now includes both laboratory research and field research. The Nutritional Advisory Committee of the Council has advised and assisted States in building up nutritional units. The Council has established an industrial health unit at the All-India Institute of Hygiene and Public Health at Calcutta, a Virus Research Centre at Poona, a centre for the study of influenza at Coonoor and a centre for the study of the epidemic of polio myelitis in Bombay. Research has also been undertaken in the problems of maternal and child health. Generally speaking the policy of the Indian Council of Medical Research has been to establish units around leading workers in different branches of medical science rather than to set up special research institutes.

DRUG PRODUCTION

20. The most important step taken in the production of antibiotics was the establishment of penicillin factory in the public sector which went into production in March 1955. The production of this plant was estimated in 1955-56 as 6.6 million mega units. At other centres a number of new drugs has been either evolved or tested. Facilities for the production of quinine in the Madras State were expanded. The production of D.D.T. and Benzene Hexachloride was taken up during the first plan. With the completion of the plant of the Hindustan Insecticides Ltd., indigenous capacity has been created for the manufacture of 700 tons of D.D.T. per annum, the present rate

of production of this factory being 1.5 tons per day. For the production of Benzene Hexachloride a total capacity of 2500 tons came into existence during the first plan. There was no substantial development during the plan in respect of the production of vitamins.

NUTRITION

21. In July 1951, the Nutrition Advisory Committee of the Indian Council of Medical Research decided upon a research programme in line with the needs of the First Five Year Plan. Priority was accorded to investigations into the nutritional requirements of the people, the nutritive value of Indian foodstuffs and nutritional diseases and disorders. The Nutrition Research Laboratory at Coonoor concentrated mainly on the study of protein malnutrition, a major nutrition problem in India, while medical colleges, universities and research institutes examined, with the aid of grants from the Indian Council of Medical Research, the nutritive quality of proteins in Indian foodstuffs, the effect of varietal factors on food crops grown in the country and other problems of nutrition. Research was also promoted in problems of fundamental importance.

22. Work on public health nutrition is a natural corollary to that in the laboratories. Extensive diet and nutrition surveys, especially of children, distribution of foodstuffs to refugees and distressed people suffering from natural calamities, distribution of skimmed milk and other foodstuffs received from the UNICEF and other voluntary agencies, execution of pilot projects and surveys e.g. goitre control in the Punjab, were among the more important activities of the State organisations.

FAMILY PLANNING

23. The First Five Year Plan described measures directed towards family limitation and the spacing of children as essential steps for securing better health for the mother and better care in bringing up children and, therefore, as an important part of the public health programme. Over a period the aim outlined was to achieve a reduction in the birth rate to the extent necessary to stabilise the population at a level consistent with the requirements of the national economy. The financial allotment for family planning made in the first plan was Rs. 65 lakhs. This provision was determined, not so much by financial considerations, as by an appreciation of the nature of the task to be attempted and the time needed for adequate preparation. The specific tasks were:—

- (1) to obtain an accurate picture of factors contributing to the rapid population increase,
- (2) to discover suitable techniques of family planning.

- (3) to devise methods by which knowledge and techniques of family planning could be widely disseminated, and
- (4) to make advice on family planning an integral part of the service rendered by Government hospitals and public health agencies.

24. The Ministry of Health set up a Family Planning Research and Programmes Committee in May, 1953. This was followed in May 1954 by the establishment of a Family Planning Grants Committee for examining and recommending applications for financial assistance for family planning work and research. The allotment for family planning under the Plan was to be used for providing grants to State Governments, local bodies and voluntary organisations, for training, education and research and for meeting the cost of a central organisation. During the plan period a total expenditure of Rs. 18.5 lakhs was incurred, of which Rs. 11.4 lakhs were accounted for by grants and Rs. 6.6 lakhs by education and research. Grants-in-aid were offered for 205 family planning clinics maintained by voluntary organisations, State Governments and local bodies and 147 clinics were opened during the plan period.

25. A number of new institutions came into existence. These included the Demographic Teaching and Research Centre and the Family Planning Training and Research Centre both of which are located at Bombay. At the Indian Cancer Research Institute a centre for testing contraceptives was set up. The Family Planning Centre at Ramnagaram which began as a centre for pilot studies in the rhythm method of family planning, was converted in March 1955 into a training, demonstration and experimental centre for rural areas. One of the main functions of this Centre is to organise training courses in family planning for work in rural areas for nurses, health visitors, midwives and social workers. Short-term training courses were also conducted at Nagpur, New Delhi and Jamnagar.

26. Pilot studies in the use of the rhythm method have been carried out at the Lodi Colony (New Delhi) and at Ramnagaram. The study of different simple methods of family planning, including foam tablets, has been in progress at Khanna in the Ludhiana district of Punjab. Research work on oral contraceptives has also been undertaken. In the field of demographic studies, mention may be made of the analysis and tabulation of fertility data gathered by the National Sample Survey, a recent study undertaken by the Gokhale Institute of Politics and Economics, Poona and investigations in fertility and mortality rates at Patna. A multi-purpose family planning project has been initiated at Lucknow. While it is too early to indicate firm conclusions on many of the subjects which

have been under investigation, the studies undertaken have revealed widespread interest in the possibilities of birth control and family limitation. It has been recognised that apart from the provision of advice and service, education has a large part to play in the success of the family planning programme. A beginning has been made in the production of leaflets, posters and other literature and two films were produced, and some family planning exhibitions have been held.

CHAPTER XV

HOUSING

A NUMBER of programmes for housing were initiated during the First Five Year Plan. These included subsidised industrial housing scheme, the low income group housing scheme, and housing schemes for plantation labour and for labour in coal and mica mines.

2. A total provision of Rs. 48.7 crores was made in the First Five Year Plan, of which Rs. 38.5 crores were allotted at the centre and Rs. 10.2 crores in the States. In addition to the allocations by the Central Government, housing schemes for workers in the coal industry were financed from the Coal Mines Welfare Fund. Housing schemes for mica and coal mines were the responsibility of the Ministry of Labour, the other schemes being administered by the Ministry of Works, Housing & Supply. Besides these schemes, substantial housing programmes were undertaken by the Ministries of Rehabilitation, Defence, Railways, Iron and Steel, Production, Communications and Works, Housing and Supply. State Governments and a certain number of local bodies also had their own housing programmes. It is estimated that during the first five year plan, the Ministry of Rehabilitation provided 3,23,000 houses or tenements in urban areas and about 300,000 units were constructed by State Governments and by Central Ministries other than the Ministry of Works, Housing & Supply. Thus, the various public housing schemes are estimated to have added during the first plan about 742,000 houses or tenements. It is difficult to estimate the extent of private construction. As has been explained in the Second Five Year Plan, data regarding construction in the private sector are not available, but an enquiry carried out for the Taxation Enquiry Commission showed that in 1953-54 the total investment on urban housing was of the order of Rs. 125 crores. If this were taken as an average for the five-year period and the average cost of a house was assumed to be Rs. 10,000 it would appear that during the first plan about 6 lakh units were provided in the private sector. Thus, in all during the first plan about 1.3 million urban houses were added.

LOW INCOME GROUP HOUSING

3. Large numbers of persons living in towns have low incomes and cannot afford to have houses of their own without assistance from the Government. Under the Low Income Group Housing

Scheme, which was finalised towards the end of 1954, loans were proposed to be given to persons with incomes not exceeding Rs. 6,000/- per annum to the extent of 80 per cent of the cost of a house with land, subject to a maximum of Rs. 8,000/- per unit. The balance of investment would be found by the parties concerned. Loans were to be repaid at $4\frac{1}{2}$ per cent interest in 30 equated annual instalments. Assistance was also extended to local bodies for constructing houses for allotment to their low-paid employees, but in this case the maximum cost was placed at Rs. 2800 per unit. By the end of the first plan, proposals estimated to cost Rs. 21.53 crores. had been approved by the Central Government, but the amount actually disbursed to States was only Rs. 11.14 crores. In turn State Governments sanctioned proposals estimated to cost Rs. 16.26 crores. and actually disbursed only Rs. 8.94 crores. 40942 houses were sanctioned under the scheme by the State Governments, but only 3930 houses were completed and another 12751 houses were under construction on March 31, 1956. The statement below shows the amounts allotted and disbursed and the number of houses sanctioned and completed during the first five year plan in different States:

Low Income Group Housing Schemes in 1954-56

States	Amount allotted by the Central Government (Rs. lakhs)	Amount disbursed by the State Governments (Rs. lakhs)	Number of houses sanc- tioned	Number of houses completed
1	2	3	4	5
Andhra	74	28.94	466	7
Assam	10	10.00	333	..
Bihar	10	10.00	140	54
Bombay.	225	32.77	1200	..
Madhya Pradesh	151	46.88	2273	50
Madras	81	32.63	1327	12
Orissa	3	11.05	260	..
Punjab	300	269.41	16794	2111
Uttar Pradesh	300	141.00	4085	310
West Bengal	200	1.22	1062	..
Hyderabad	100	44.48	892	138
Madhya Bharat	90	43.90	1389	9
Mysore	100	48.00	1070	40
Pepsu	41	31.79	3387	24
Rajasthan	100	61.40	2508	118

States	Amount allotted by the Central Government (Rs. lakhs)	Amount distributed by the State Governments (Rs. lakhs)	Number of houses can- tioned	Number of houses completed
1	2	3	4	5
Saurashtra	50	15.18	1001	75
Travancore-Cochin	15	0.01	2	..
Ajmer	20	1.40	47	..
Bhopal	10	2.15	71	5
Coorg	6	1.19	199	..
Delhi	200	52.97	2234	880
Himachal Pradesh	20	1.57	52	49
Kutch	3	..	..	..
Vindhya Pradesh	9	5.86	130	48
Jammu and Kashmir	35	Applications were being called for		
TOTAL	2153	893.80	40942	3930

In due course the approved programmes would no doubt be completed in each State, but the results achieved in the initial years suggest that the scheme came up against such difficulties as lack of building sites, inadequate organisation and procedures at the State level and the district level and problems connected with supply of building materials, approvals of plans, etc.

SUBSIDISED INDUSTRIAL HOUSING SCHEME

4. Two industrial housing schemes were tried out before the introduction of the subsidised industrial housing scheme under the First Five Year Plan. According to one scheme, which was formulated in 1949, the Central Government agreed to provide interest-free loans to State Governments or to private employers sponsored by them to the extent of two-thirds of the cost of housing schemes, on the condition that the rent charged did not exceed $2\frac{1}{2}$ per cent of the capital cost subject to a maximum of 10 per cent of workers' wages. In this scheme, the employers were expected to find one-third of the cost. Early in 1952 a new scheme was proposed under which the Central Government was to pay subsidy upto 20 per cent of the cost of construction including the cost of land, the balance of the cost being met by employers to whom the houses were to belong. The houses were to be leased to genuine workers on the same terms as in the 1949 scheme. Neither of these schemes led to substantial results. In the First Five Year Plan, therefore, it was recommended that a new industrial housing scheme providing for a larger subsidy and supplemented by loans should be worked out. In accordance with this recommendation the subsidised industrial housing scheme was introduced towards the end of 1952-53.

5. Under this scheme State Governments were given loans upto 50 per cent at 4½ per cent interest and subsidy upto 50 per cent of the total cost. Employers were offered 25 per cent of the cost as subsidy and 37½ per cent of the cost as loans Cooperatives of industrial workers were offered 50 per cent of the cost as loan and 25 per cent as subsidy. The subsidy of 50 per cent was found necessary to bring down the economic rent within the paying capacity of an average industrial worker. The economic rent of even a small one-roomed house of 220 sq. feet floor area in an average town except Bombay and Calcutta was Rs. 20 to 22/- p.m. while the rent paying capacity at the most could not be considered more than Rs. 10/- per month. Upto the end of the first five year plan schemes for the construction of 79,679 tenements were approved; of these, 68,200 tenements were to be built by State Governments, 10,161, by private employers and 1,318 by cooperative societies. During the plan period the number of tenements completed was 43,834, of which 37,217 were built by State Governments, 6,079 by private employers and 538 by cooperatives. The following statement gives the distribution of tenements sanctioned and completed in different State in the three groups:

Number of tenements sanctioned and completed during 1952-56

State	Sanctioned				Completed			
	Government	Employers	Cooperatives	Total	Government	Employers	Cooperatives	Total
Andhra . . .	100	269	..	369	..	245	..	245
Assam . . .	..	190	..	190	..	..	..	..
Bihar . . .	2,035	1,390	..	3,425	667	1,170	..	1,837
Bombay . . .	17,762	493	940	19,195	8,817	235	451	9,503
Madhya Pradesh	4,950	231	..	5,181	1,620	231	..	1,851
Madras . . .	936	1,223	..	2,159	..	372	..	372
Orissa . . .	281	1,078	..	1,359	161	728	..	889
Punjab . . .	1,070	724	207	2,001	324	600	..	924
Uttar Pradesh .	20,719	941	49	21,709	13,426	314	23	13,763
West Bengal . .	1,440	812	..	2,252	756	200	..	956
Hyderabad . . .	5,429	200	..	5,629	3,974	200	..	4,174
Madhya Bharat .	3444	350	..	3,794	3,314	150	..	3,464
Mysore . . .	3,550	1,345	..	4,895	2,730	762	..	3,492
Pepsu . . .	140	192	..	332	..	192	..	192

State	Sanctioned				Completed			
	Government	Employers	Co-operatives	Total	Government	Employers	Co-operatives	Total
Rajasthan . . .	2,200	401	..	2,601	..	368	..	368
Saurashtra . . .	1,700	150	64	1,914	1,078	140	64	1,282
Travancore-Cochin	318	..	..	318	100	..	..	100
Bhopal . . .	750	72	..	812	250	72	..	322
Delhi . . .	1,376	100	58	1,534	..	100	..	100
<hr/>								
Total	63,200	10,161	1,318	79,579	37,217	6,079	538	43,834

It will be seen that for lack of the necessary machinery or other resources several States took only meagre advantage of the scheme and except for Uttar Pradesh, Bombay, Hyderabad and Madhya Bharat, the scheme did not make during the first five year plan the impact on the housing of industrial workers which had been hoped for. The Central Government sanctioned assistance amounting to Rs. 22.6 crores, Rs. 11.8 crores as subsidy and Rs. 10.8 crores as loans. The amounts disbursed were Rs. 8.77 crores as loan and Rs. 4.59 crores as subsidy.

6. The result achieved under the subsidized industrial housing and the low-income housing schemes during the first five year plan would suggest the need for careful re-examination of the entire urban housing problem. In both schemes the scale of effort depends excessively on the amounts provided by the Central Government and neither institutional nor private finance is called into play to any great extent. The implementation of the two schemes has suffered on account of the lack of adequate organisation in many States. Also, under both schemes, the difficulties in the provision of land for building led to slow progress. It should be added that the subsidised industrial housing schemes was in operation for a little more than 3 years and the low income group housing schemes for less than two years.

RURAL HOUSING

7. In areas taken up under the national extension service and community projects programme some steps were taken towards the improvement of living conditions in villages. Thus, about 29,000 houses were constructed and about the same number reconditioned.

In some States, notably Uttar Pradesh, the establishment of cooperative brick kilns became a fairly popular programme and stood out as a sign of changing rural conditions. It would, however, be true to say that over the first plan period the rural housing problem was scarcely touched.

HOUSING RESEARCH

8. As recommended in the First Five Year Plan the Ministry of Works, Housing & Supply set up the National Buildings Organisation in July, 1954. The functions of the Organisation were to collect and disseminate information on building science, techniques and materials, formulation and coordination of research programmes, standardisation of building legislation, by-laws, etc. The National Buildings Organisation established a journal to serve as a forum for discussion and undertook a number of experiments. Close co-ordination was also established between this organisation, the Central Buildings Institute, Roorkee and Research centres in the States.

CHAPTER XVI

WELFARE OF BACKWARD CLASSES AND OTHER SOCIAL SERVICES

BACKWARD CLASSES AND SOCIAL WELFARE SERVICES

THIS Chapter reviews developments during the first five year plan in four different fields:

- (1) Welfare of backward classes and other social welfare services,
- (2) Labour policy and welfare,
- (3) Prohibition,
- (4) Rehabilitation of displaced persons.

The First Five Year Plan made a beginning in translating into concrete policies and programmes one of the important objectives of national planning, namely. the provision of opportunities of growth for sections of the population who are specially backward and removal of handicaps from which they have long suffered. These sections were:

- (1) scheduled tribes, numbering about 19 million,
- (2) scheduled castes, numbering about 51 million,
- (3) communities formerly described as 'criminal tribes' who number a little over 4 million, and
- (4) other groups which may be declared as being socially and educationally backward.

These groups cannot profit sufficiently from programmes of economic development which are undertaken from the point of view of the national economy as a whole unless, they are quickly brought nearer equality with other sections of the population. This process entails special measures for raising their living conditions, affording them increased opportunities for education and training and improving communications in areas in which they live in large numbers. Welfare programmes for backward classes were a relatively new area of work both for Government and for non-official agencies and although, here and there notable efforts had been made before the plan, what had been done in the past amounted to very little. At the same time, it had to be recognised that in the initial stages progress might be slow, for, large bodies of personnel would need to be trained and effective methods of communication and welfare work

among different sections of backward classes would need be worked out through practical experience.

2. The plan provided for about Rs. 28.9 crores for the welfare of backward classes, the total provision being raised in the course of the plan period to Rs. 31.9 crores. This included Rs. 5.1 crores under the Assam plan and a provision of Rs. 7 crores at the Centre with the Ministry of Home Affairs, leaving the balance of Rs. 19.8 crores in the plans of various States. In addition, outside the plan, there was a further allotment of Rs. 9 crores by way of grants by the Central Government under Article 275(1) of the Constitution. The provision of Rs. 7 crores at the Centre included Rs. 4 crores for the welfare of scheduled castes, former criminal tribes and other backward classes. The balance of Rs. 3 crores was made available along with other Central grants for welfare programmes for scheduled tribes. The bulk of the expenditure by the Central Government took place in the last two years of the plan. In the States also the level of expenditure increased steadily from Rs. 3.25 crores in 1951-52 to Rs. 6.43 crores in 1954-55 and Rs. 8.33 crores in 1955-56.

3. Against a total allotment under the plan of Rs. 31.9 crores for the welfare of backward classes, the outlay in each year of the plan was as follows:—

	(Rs. crores)
1951—52	3.25
1952—53	3.89
1953—54	6.28
1954—55	8.09
1955—56	11.27
(Revised)	
TOTAL	<hr/> 32.79 <hr/>

Welfare programmes for backward classes were intended to supplement programmes designed to step up the general rate of economic development and to benefit the population as a whole. Priorities in these programmes had to be adapted to local conditions and had to be fairly flexible. It was also essential that personnel engaged by State Governments should not only be trained, but should first of all gain intimate knowledge of the habits, customs, traditions and cultural background of the people among whom they worked. The various communities described as 'backward' have rich individual traditions of their own and are sensitive to any suggestion of intrusion in their cultural or economic life, so that the initial stages of work amongst them are of the highest importance. The progress of welfare programmes among them cannot therefore be

assessed quantitatively or in terms of short periods such as three to five years. Apart from the problem of training personnel, it was necessary to survey the needs of different areas and different groups of the population and prepare the ground for work by Government agencies and non-official workers in cooperation with the local people. State cardres for work among the backward classes also took time to organise. Another important problem, to which only a partial solution has been found so far, was that of coordination of general development programmes with those intended especially for the benefit of backward classes.

4. The place of education in the development of scheduled tribes cannot be too greatly stressed. During the plan about 4000 schools were established for children of scheduled tribes. These included about 1000 *ashrams* and *seva ashrams*. About 450,000 received assistance in the form of grants for purchase of books, scholarships, boarding fees, etc. During 1955-56, the last year of the plan, about Rs. 1.28 crores were spent on education programmes, 48,500 students benefited from stipends and scholarships and 45,000 from various forms of grants and fees. An attempt has been made increasingly to teach tribal children through their own dialects and, in Assam, Hyderabad, Bihar and NEFA, text books have been prepared in local dialects.

5. Some of the special problems of scheduled tribes and scheduled areas arise from their isolation from cultural and economic developments elsewhere on account of lack of communications. Considerable attention was therefore given to the construction of bridge and hill paths in different States. In all, about Rs. 6 crores were spent on the development of communications and 2,340 miles of roads and bridge and hill paths were constructed. In 1955-56, 1497 miles of roads and paths were made.

6. Tribal areas represent a stage of extreme under-development in resources. Consequently, tribal populations live in a state of great poverty. During the plan some attempt has been made to introduce measures for the economic rehabilitation of tribal population living in forests as well as those engaged in agriculture and other occupations. In forest areas, the elimination of forest contractors and other middlemen is an essential step. In some States forest labour cooperatives have been encouraged, the total number of such cooperatives organised being 653. In this the lead was taken by the former State of Bombay, although forest cooperatives have also been organised in Andhra, Madhya Pradesh, Hyderabad and Travancore-Cochin. Some attention was begun to be given to the problem of shifting cultivation, which is a distinguishing feature of tribal agriculture in Assam, Madhya Pradesh, Orissa and Andhra. Preliminary work undertaken in this field emphasised the need for

educating the tribal people in settled forms of agriculture, demonstrating to them the advantages of terracé cultivation and showing them improved agricultural methods which would enable them to obtain better yields. Nine demonstration centres and pilot projects were started in Assam and similar schemes have been introduced in Bastar and other tribal areas in Madhya Pradesh. In 1955-56 48 demonstration farms were opened in the States for imparting training in improved methods of agriculture to tribal people from hills areas. A number of colonies have also been established and 8000 families settled in them. During the plan period about 310 multi-purpose cooperative societies were set up and about 350 Grain Banks were organised in tribal areas in Orissa, Bihar and Madhya Pradesh. In Bombay, Hyderabad, Bihar and Madhya Bharat the tribal people are engaged in settled forms of agriculture, but their yields are low and methods of cultivation inefficient. Some assistance has been given to them by way of improved implements, supply of seeds and supply of better breeds of cattle.

7. Several States carried out programmes for developing cottage industries and subsidiary occupations among tribal populations. These included bee-keeping, sheep-rearing, weaving, sericulture and palm gurs. In 1955-56, about 800 tribals received training in weaving, sericulture and fruit preservation and about 750 persons received assistance in starting trades in which they had been trained. About 110 cottage industry centres were established and in some cases these were supported by peripatetic demonstration-cum-training parties.

8. One of the principal handicaps from which the tribal people suffer is their poor health and physique. During the first plan, about 3,200 dispensaries and mobile health units, 25 malaria control centres and 26 maternity and child welfare centres were established in tribal areas. In several areas an attempt was made to provide supply of clean drinking water. In 1955-56, 1100 wells were sunk and 1340 repaired in tribal areas.

9. Several States recognised the contribution which tribal institutions could make to the reconstruction of tribal economies. Tribal research institutes were organised in Bihar, Orissa, Madhya Pradesh and West Bengal and tribal bureaus were set up in Rajasthan and Madhya Pradesh. These institutions carried out surveys and undertook visual education programmes, besides stimulating local cultural activity. In all the States which have tribal populations, tribal advisory boards were organised with a view to helping the State Governments in drawing up and implementing welfare programmes.

10. The problems of scheduled castes are closely inter-twined with those of other sections of the population amongst whom they live. During the first five year plan, special attention was given to securing through legislative measures a sense of equality with others and through economic and social welfare programmes a steadily expanding area of opportunity. The Untouchability Offences Act, which made untouchability a cognisable offence, was enforced in June, 1955. The Central Government gave financial assistance to voluntary organisations working amongst scheduled castes and others in programmes designed to eliminate untouchability and for general propaganda and publicity. During the plan about 4,500 wells were sunk for the benefit of scheduled castes, of which 2134 were sunk in 1955-56. In the same year about 3,100 houses were also built. About Rs. 1.6 crores were spent on providing educational facilities for the children of scheduled castes over and above concessions provided by the Ministry of Education and the Education Departments in the States. The Ministry of Education incurred an expenditure of about Rs. 3.65 crores during the plan for granting 8,464 scholarships to tribal students 36,955 scholarships to Harijans and 27,725 scholarships for students from other backward classes.

11. In 1952, when restrictions and limitations from which the former criminal tribes had long suffered were withdrawn by legislation, the main problem for this section of the population was to find useful occupations upon which they could subsist. If they had some livelihood, their children could be weaned away from theft and other evils. The total allotment under the plan, both at the Centre and in the States, for programmes for the former criminal tribes and other backward classes was Rs. 3.5 crores. By the end of the first plan about 17 settlements and 30 colonies had been set up, more than 3,600 families had received assistance for agricultural development, 113 cooperatives had been organised and 337 industries centres set up in their interest. About 290 educational centres and schools were established for the children of the former criminal tribes. Scholarships, stipends and other grants were given in all to 142,100 students belonging to backward classes other than Harijans and 44 women's welfare centres were established.

12. In the North East Frontier Agency, which has a tribal population of about 800,000 the administration was greatly strengthened through the formation of a new cadre known as the Indian Frontier Administrative Service. This service is expected to provide a continuous supply of trained and experienced officers for Grade I and Grade II administrative posts in N.E.F.A., Manipur and Tripura. Lack of communications being perhaps the most serious obstacle in implementing welfare programmes in this area, special attention has been given to this aspect of reconstruction. During the first

plan about 4,445 miles of roads, tracks and paths were constructed. Land development work was undertaken over an area of 17,181 acres and 63 persons received training in agriculture. In all, during the first plan 170 schools, which include 16 middle schools and 2 high schools, were established and 100 teachers were trained. In addition, 11 mobile health units and 32 anti-malaria units were organised and 75 stipends were awarded for training in medicine.

SOCIAL WELFARE

13. In addition to programmes undertaken in the interests of the backward sections of population, an earnest beginning was also made during the first five year plan with the organisation of welfare services for women and children, especially in rural areas, and in collaboration with voluntary organisations. At the Centre an allotment of Rs. 4 crores was made under the Ministry of Education to be administered through the Central Social Welfare Board with the object mainly of developing welfare programmes for women and children, especially in rural areas, with the support as far as possible of voluntary organisations. The Central Social Welfare Board assisted 2,174 voluntary organisations with grants-in-aid amounting to Rs. 75.43 lakhs. Of these, 592 organisations were engaged in child welfare, 676 in women's welfare, 150 in the welfare of handicapped persons and 765 for general welfare. The work of the Central Board was supported by State Welfare Boards which have been set up in all States. For extending welfare services for women and children and securing the cooperation of voluntary organisation, working in rural areas, the Central and State Social Welfare Boards took in hand the organisation of welfare extension projects. About 300 such projects were undertaken. Each project served a group of about 25 villages. The total expenditure incurred by the Board in welfare extension projects during the plan period was about Rs. 85 lakhs. Recognising the serious shortage of trained personnel, especially of women workers, the Central Social Welfare Board arranged for the training of 550 women village level workers (gram sevikas) with the help of the Kasturba Gandhi National Memorial Trust.

14. A new development during the first five year plan was the organisation of youth camps and of labour and social service by students in universities and educational institutions for which the plan had made a provision of Rs. 1 crore. In 1955-56, 985 labour camps were organised, of which 555 were organised by the Bharat Sevak Samaj, 253 by State Governments, 64 by the National Cadet Corps, and Auxiliary Cadet Corps and 86 by other organisations. The number of young people participating in these camps were respectively 45,057, 22,106, 36,971, and 6,928. Voluntary work from students was secured by a number of institutions for developing

amenities for their respective institutions such as open air theatres, recreation halls-cum-auditorium, stadia, swimming pools, etc. These activities were developed mainly in the last two years of the plan, during which the total expenditure was of the order of about Rs. 99 lakhs, of which about Rs. 74 lakhs was spent on labour camps and about Rs. 25 lakhs on camp work projects.

15. It will be seen thus that even though it may not be possible to measure the results of welfare programmes initiated during the first five year plan, in several directions new and important starts were made. These have helped to increase the consciousness among the backward groups of their problems and have stimulated the desire among them to improve their living conditions, learn new skills and avail increasingly of the new opportunities which are now being created.

LABOUR POLICY AND WELFARE

16. A comprehensive approach to the problems of organised labour was set out in the First Five Year Plan and has in broad terms guided the labour policy of Government in recent years. Actions taken on the various recommendations made in the Plan was reviewed in September 1955 by the Panel on Labour set up by the Planning Commission.

17. During the first four years of the plan there was a very considerable reduction in the number of industrial disputes and the number of workers involved and in the total number of man-days lost. During 1955, however, on account of a general strike in the Kanpur Textile Industry, industrial relations were disturbed for a period.

18. The need for associating labour with management in the solution of industrial problems, gained increasing recognition as the plan proceeded. The Tata Iron and Steel Company led the way with an agreement with the representative trade union organisation which provided for joint consultation. The question of bonus was settled amicably in the textile industries in Bombay and Ahmedabad. The Aluminium Company at Calcutta also entered into an agreement on employee consultation. The Joint Consultative Board, set up voluntarily by representatives of employers and workers, provided a useful forum for mutual consideration of policy issues affecting labour.

19. A standing committee, which includes representatives of the employing Ministries, has been set up for the purpose of determining specific standards for welfare in public undertakings.

20. In the First Five Year Plan it was recommended that tripartite agreements should be drawn up in organised industries regarding standards of compliance with the provisions of factory legislation on working conditions and welfare facilities and that there should be effective machinery for reviewing these agreements. A beginning in this direction was made in the Cement industry.

21. Enquiries into the problems of industrial health and hygiene were carried out in a number of industries by Chief Adviser of Factories. In some of the studies undertaken there were arrangements for collaboration with institutions like the Ahmedabad Textile Industry Research Association and the All-India Institute of Hygiene and Public Health.

22. The National Productivity Centre which was established at Bombay in 1954 undertook a number of projects. These included a refresher course in industrial engineering for teachers from engineering colleges, a management course for factory executives, a training programme in time and motion study and rate setting for senior officers from the Directorate-General of Ordnance Factories, a training course in time and motion study at the Hindustan Aircraft Limited, Bangalore and a productivity project for the Bombay State Transport Corporation's Central workshop. Training-within-industry programmes were conducted at New Delhi, Nagpur and Bombay with the assistance of experts from the International Labour Organisation.

23. The administration of employment exchanges and of craftsmen training centres was transferred to State Governments towards the end of the first plan in accordance with the recommendations of the Training and Employment Services Organisation Committee which reported in 1954. The activities of the Employment Service Organisation under the Ministry of Labour were expanded to include a pilot scheme for the collection of employment market information in Delhi, preparation of a revised national classification of occupations, of employment counselling for juveniles and adults, issue of career pamphlets and the publication of a handbook of training facilities.

24. A number of labour welfare schemes which had been included in the plans of States were implemented. In Bombay a Welfare Board was constituted and labour welfare organisation of the State Government was placed under its direction. A two-year diploma course in labour welfare was provided in Bombay and a well-equipped research laboratory was placed under the control of the Chief Inspector of Factories. In Bihar a small research unit was established for studying health problems of industrial workers and an industrial hygiene laboratory was located at Patna. Altogether

about 70 welfare centres and a number of health centres, night schools and nurseries were established in the States during the plan period.

PROHIBITION

25. For a considerable period States like Bombay, Madras and Andhra have prohibited the consumption of intoxicating drinks and of drugs injurious to health. This was accepted as a directive principle of State policy under Article 47 of the Constitution. Since States had found real difficulties in the way of extending the policy of prohibition, the Planning Commission set up in 1954 a special committee to review the experience gained regarding measures adopted by State Governments, and to make recommendations for a programme of prohibition on a national basis, indicating the manner and stages in which and the machinery through which this programme should be carried out. The recommendations of this committee were considered in relation to the Second Five Year Plan. State Governments were requested to evolve phased programmes and, at the same time, to ensure that the programmes were drawn up so as to implement the policy of prohibition within a reasonable period.

26. On March 31, 1956 the Lok Sabha passed the following Resolution:—

"This House is of the opinion that prohibition should be regarded as an integral part of the Second Five Year Plan and recommends that the Planning Commission should formulate the necessary programme to bring about nationwide prohibition speedily and effectively."

A number of immediate steps to which State Governments might give effect were recommended. These included:

- (1) discontinuance of advertisements and public inducements relating to drink;
- (2) stoppage of drinking in public premises (hotels, hostels, restaurants, clubs) and at public receptions (subject to care being taken to ensure that the rights of foreign missions were not affected and foreign visitors and tourists were not put to inconvenience or harassment);
- (3) setting up of technical committees to draw up phased programmes with the object of:
 - (a) reducing progressively the number of liquor shops both in rural and urban areas;
 - (b) closing liquor shops for an increasing number of days during the week,

- (c) reducing quantities supplied to liquor shops,
- (d) progressively reducing the strength of distilled liquor produced by distilleries in India,
- (e) closing of shops in and near specified industrial and other development project areas, and
- (f) removal of shops to places away from main streets and living quarters in towns and villages;
- (4) taking active steps to encourage and promote the production of cheap and healthy soft drinks;
- (5) assisting voluntary agencies in organising recreation centres; and
- (6) including prohibition as an item of constructive work in national extension and community project areas and social welfare extension projects.

REHABILITATION OF DISPLACED PERSONS

27. Between 1947-48 and 1955-56 a total sum of Rs. 287 crores was spent on the evacuation, relief and rehabilitation of displaced persons. Of this sum, about Rs. 168 crores were spent on rehabilitation. Expenditure on rehabilitation before the plan amounted to about Rs. 71 crores and during the plan to about Rs. 97 crores. Rehabilitation expenditure falls broadly into three categories, namely, that devoted to displaced persons from West Pakistan and to displaced persons from East Pakistan and loans by the Rehabilitation Finance Administration, which are given to both categories of displaced persons. During the plan period expenditure under these heads amounted respectively to Rs. 48.68, 42.31 and 6.3 crores. For the plan period, initially a provision of Rs. 85 crores was made but later additions and adjustments brought up the gross total to Rs. 135.7 crores. As mentioned above, allowing for revised estimates for 1955-56, the expenditure incurred during the plan period was Rs. 97.3 crores. The progress of expenditure from year to year during the plan period is shown in the statement below:

(Rs. crores)

	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Actuals	1955-56 Revised	1951-56
Displaced persons from West Pakistan . . .	14.70	10.78	6.08	6.61	38.17	10.51	48.68
East Pakistan . . .	10.23	8.43	4.90	8.17	31.73	10.58	42.31
Loans by Rehabilitation Finance Administration	1.25	1.05	2.50	0.90	5.70	0.60	6.30
TOTAL . . .	26.18	20.26	13.48	15.68	75.60	21.69	97.29

28. Expenditure on rehabilitation may be classified broadly under six heads, namely, rural loans; urban housing; educational, technical training and allied schemes; Rehabilitation Finance Administration loans; urban loans other than those given by the Rehabilitation Finance Administration; and industrial loans. The following statement shows separately for displaced persons from West Pakistan and from East Pakistan under different heads (other than loans from the Rehabilitation Finance Administration expenditure) during each year of the first five year plan.

Expenditure on Rehabilitation of Displaced persons

(Rs. crores)

Head	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1955-56 Revised	1951-56
<i>(a) West Pakistan</i>						
1. Rural loans	0.90	0.47	0.06	..	0.98	2.41
2. Urban housing	11.77	8.30	4.51	4.29	6.45	35.32
3. Educational technical training and allied schemes	1.26	1.20	0.94	1.32	1.37	6.09
4. Urban loans other than R.F.A. loans	0.77	0.81	0.57	0.68	0.62	3.45
5. Industrial loans . . . .	..	..	..	0.32	1.09	1.41
TOTAL(a)	14.70	10.78	6.08	6.61	10.51	48.68
<i>(b) East Pakistan</i>						
1. Rural loans	2.12	3.09	1.49	2.61	2.03	11.34
2. Urban housing	4.38	2.80	1.43	2.43	5.56	16.60
3. Educational technical training and allied schemes	1.21	0.91	1.01	1.15	1.48	5.76
4. Urban loans other than R.F.A. loans	2.52	1.63	0.97	1.98	1.10	8.20
5. Industrial loans . . . .	..	..	..	..	0.41	0.41
TOTAL(b)	10.23	8.43	4.90	8.17	10.58	42.31

29. Loans given by the Rehabilitation Finance Administration amounted to Rs. 6.3 crores, of which Rs. 4.8 crores were advanced during the first three years of the plan and Rs. 1.5 crores during the last two years.

30. *Displaced persons from West Pakistan:* The bulk of the work relating to the quasi-permanent allotment of land in Punjab and Pepsu to displaced land owners from West Punjab and persons of Punjabi extraction from Sind, Bahawalpur, N. W. F. P. and Baluchistan was completed before the beginning of the first five year plan. About 4.77 lakhs displaced owners were settled on 23.35 lakh 'standard acres'. Outside the Punjab and Pepsu, land was allotted to about 58,000 displaced families, most of them being settled in Rajasthan. Rural houses appurtenant to land were also given to displaced families settled on land. During 1951-56 Rs. 2.41 crores were advanced as loans to displaced families settled on land for the purchase of agricultural implements, bullocks and seeds. With the enactment of the Displaced Persons (Compensation and Rehabilitation) Act, 1954, began the final stage of rural resettlement in Punjab and Pepsu. By November 1956, proprietary rights on a quasi-permanent basis were conferred on 2,33,307 allottees over 17.5 lakh 'standard acres'. The Sanads issued also covered transfer in permanent ownership of the appurtenant rural houses and the ownership of 72,473 houses was thus transferred. Outside the Punjab and Pepsu, 12,773 claimants were allotted 2.18 lakh acres on a quasi-permanent basis. Conferment of proprietary rights on land held by displaced agriculturists from Sind, Bahawalpur, N. W. F. P. and Baluchistan had to wait the verification of their claims with reference to copies of revenue records from Pakistan. Agriculturists from these areas were, however, given permission to purchase both Government-built property and evacuee property in the Compensation Pool against the capitalised value of compensation due on their verified land claims.

31. The rehabilitation of displaced persons in urban areas presented several difficult problems. Accommodation had to be found for nearly 2.5 million displaced persons from West Pakistan in urban areas, but evacuee houses could provide for nearly half the number. An extensive construction programme was undertaken at centres where displaced persons had settled in large numbers. In pursuance of this programme, 19 fully developed townships and 136 colonies were constructed in which in varying degrees, education, medical and other civic amenities were provided. In these townships and colonies, 155,000 houses and tenements were constructed by the Government. These along with houses built by displaced persons with loans amounting to Rs. 1.37 crores given by Government provided accommodation for about a million persons. The total expenditure on housing exceeded Rs. 60 crores, of which about Rs. 35 crores were spent during the plan period.

32. For assistance to displaced persons to rehabilitate themselves in business, trade, industry and professions, a scheme for small

urban loans up to a maximum of Rs. 5,000 was introduced in December 1947. Up to 1950-51, about Rs. 11.18 crores were advanced under this scheme. During the first plan the amount advanced was Rs. 3.45 crores. Business and industrial loans exceeding Rs. 5,000 in amount were advanced by the Rehabilitation Finance Administration.

33. Early in 1948, the Ministry of Rehabilitation introduced a scheme for training displaced persons in vocational and technical trades. The scheme was reviewed in 1952 by a committee which considered such questions as training standards, reorganisation of training centres and trades to be taught. Against a target of 80,000 displaced persons to be trained during the first plan at the end of 1955, 75,000 displaced persons had been trained and 6,000 were under training. Displaced persons admitted for technical training were given stipends during their period of training. After training, loans under the small urban loan scheme were given on a priority basis to such displaced persons as agreed to set up independent businesses. On schemes of technical and vocational training, Rs. 2.79 crores were spent during the plan.

34. Difficulties in continuing the education of their children were not the least among the problems which displaced persons had to face. The Ministry of Rehabilitation, therefore, introduced schemes (a) for financial aid to students and (b) for expansion of education facilities through assistance to existing institutions, and to institutions of displaced persons from West Pakistan, and the opening of new institutions. In States where primary education was not free, displaced students were exempted from payment of tuition fees and in hard cases cash grants were given for purchase of books. In secondary and higher classes, 50 per cent of displaced students were given freeships, half-freeships and cash grants. Promising students who obtained a first class in the Matriculation and Intermediate examinations were granted stipends for higher education. This scheme provided for medical, engineering as well as other technical education. A sum of Rs. 6.05 crores was spent up to the end of 1955-56 on assistance to students. Besides, Rs. 96 lakhs were sanctioned as grants-in-aid to educational institutions. The National Discipline Scheme was introduced in 1954 and extended to 70,000 children mainly in institutions assisted by the Ministry of Rehabilitation.

35. In many refugee townships, colonies and concentrations, unemployment was a chronic problem. It was therefore decided in November 1953, to provide financial assistance to private industrialists for setting up medium or large industries at centres which had large concentrations of displaced persons. Conditions such as

the selection of all unskilled workers and of as many skilled persons as possible from amongst displaced persons were laid down. Among the concessions given were the allotment of factory sites on instalment basis, lease of factory buildings on rent, loans for the construction of buildings and for the purchase of machinery up to 50 per cent of the cost at concessional rates of interest, and supply of water and electricity at rates comparable to those prevailing in the neighbouring industrial areas. In the western region 23 schemes involving an assistance of Rs. 83 lakhs and with a total employment potential of 3740 for displaced persons were approved by the Ministry of Rehabilitation.

36. The scope of employment in medium and heavy industries using modern machinery being limited, it was also decided to give financial assistance to displaced persons for setting up cottage industries. Assistance was also extended to displaced or non-displaced parties for setting up small industries subject to the stipulation that in accordance with the prescribed rules employment benefits would accrue to displaced persons. For cottage and small scale industries, loans were advanced upto 75 per cent of the investment on land, building, machinery and working capital. Upto the end of December 1955, about 1.9 lakh displaced persons secured employment through employment exchanges.

37. After the enactment of the Displaced Persons (Claims) Act in 1950, claims were invited from displaced persons for all immovable property, left in West Pakistan, except agricultural lands. It took nearly three years to complete the verification of claims which numbered about 4 lakhs. The Interim Compensation Scheme which was introduced in 1953 provided for the payment of maximum compensation upto Rs. 8,000 to certain priority categories of displaced persons. The Displaced Persons (Compensation and Rehabilitation) Act empowered the Central Government to acquire evacuee property for the relief and rehabilitation of displaced persons and for the payment of compensation. The evacuee property acquired under the Act formed the nucleus for the Compensation Pool to which was added property constructed by Government for the benefit of displaced persons as also rehabilitation loans which had been advanced to displaced persons. Upto 29th February, 1956 about 85,800 claimants were paid compensation amounting to Rs. 25.47 crores. Loans and other public dues of the value of Rs. 3.8 crores due from displaced persons and property of the value of about Rs. 5.05 crores transferred to displaced persons were adjusted against the compensation paid to them.

38. *Displaced persons from East Pakistan:* With the progress of rehabilitation, by the middle of the first plan, the problems of displaced persons from West Pakistan had assumed more or less

manageable proportions. About this time a new problem arose and its dimensions became a source of serious anxiety. This was due to the increasing influx of displaced persons from East Pakistan. At the end of 1956 the population of displaced persons in the Eastern region was estimated to be 40 lakhs of whom 31 lakhs or 77.5 per cent were concentrated in West Bengal. Over 3.5 lakh displaced persons were being maintained in relief camps and homes. Between 1951 and 1956, Rs. 27 crores were spent on relief. As mentioned earlier, expenditure on rehabilitation schemes during this period amounted to Rs. 42.31 crores, which amount included about Rs. 5 crores advanced as food loans. In December 1952, a committee consisting of the Central Ministers of Finance and Rehabilitation and Chief Minister, West Bengal, made an assessment of the progress achieved in the rehabilitation of displaced persons from East Pakistan. A Fact Finding Committee of officials was set up to collect the necessary data for the Committee.

39. Upto the end of first plan nearly 5 lakh families were rehabilitated in the Eastern zone. Of these, about 4 lakhs were settled on land and in other ancillary occupations in rural areas and about one lakh in the urban trades. During the plan loans amounting to Rs. 11.34 crores were advanced in rural areas; Rs. 8.2 crores were advanced under the urban loans scheme. Housing loans amounting to Rs. 16.6 crores were advanced for the construction of about 3.35 lakh houses in rural and urban areas. For the education of displaced children, new schools and colleges were opened and existing institutions helped to expand their capacity. Under the vocational and technical training scheme, at the end of 1955, 22,000 displaced persons had been trained and another 8,000 were receiving training. The total expenditure during the plan on education, vocational and technical training and assistance to educational institutions amounted to Rs. 5.76 crores.

40. Under the scheme for establishing industries in refugee townships and colonies, in the eastern region, 12 medium industries schemes with an employment potential of 7,725 displaced persons were approved and loans amounting to Rs. 1.8 crores sanctioned. About Rs. 25 lakhs were sanctioned as loans for cottage and small-scale industries. Employment for 42,000 displaced persons was made available through contract for construction and development work in refugee townships and colonies which were given by the Contract Division of the West Bengal Government. The Government of West Bengal advanced a loan of Rs. 45 lakhs for expanding the State Transport Organisation with a view to providing employment to 1,200 displaced persons.

REVIEW OF THE FIRST FIVE YEAR PLAN

41. Although 4 lakh families were settled on land and 1 lakh in urban colonies and concentrations, their rehabilitation was far from complete. Due to paucity of suitable land, often uneconomic holdings or marginal lands were allotted. In townships and colonies essential amenities could not be provided. Condition of unemployment continued in their colonies. Efforts were made to locate suitable stretches of land in States outside the Eastern region and to reclaim and develop even marginal lands in the Eastern region with a view to the rehabilitation of displaced agriculturists. The subject was considered by the National Development Council in May 1955, and later at a conference of Rehabilitation Ministers in January 1956, surveys of available lands in various States were undertaken

CHAPTER XVII

ADMINISTRATION AND PUBLIC COOPERATION

THE principal objective in administration is the achievement of high standards of efficiency and integrity; and the securing of a large measure of public cooperation. Throughout the period of the plan, the means to be adopted for realising these objectives received attention and a number of steps were taken. At the same time, during these years, the problems of public administration have grown in scope and complexity. The process of building up the administration for the tasks which have to be carried out is, therefore, a continuous one.

2. In the First Plan the principal problems which arise in the improvement and strengthening of the administration were divided into three broad groups. First, there were problems bearing on the entire field of administration such as, the achievement of high levels of integrity, efficiency and economy. Secondly, there were problems bearing upon the administration of development programmes in the district which link at one end with administration at the State level and, at the other, with village institutions. Thirdly, there were problems connected with the need for harnessing the energies and willing cooperation of the people in carrying out programmes of national and local development. In this chapter the measures taken in the directions outlined above are briefly reviewed.

INTEGRITY IN ADMINISTRATION

3. A number of steps to combat corruption in administration have been taken at the Centre and in the States on the lines of recommendations made in the First Five Year Plan. Thus, at the Centre the Special Police Establishment was strengthened and the Ministry of Home Affairs set up a Vigilance organisation with which were associated vigilance units in individual Ministries and Departments. As there is a close connection between integrity and efficiency, Vigilance staff in the Ministry of Home Affairs was placed under the same direction as the Organisation and Methods Directorate of the Cabinet Secretariat. As the largest public employer, the Ministry of Railways arranged for a careful study of the problems of corruption by a special committee and also set up vigilance units both in the Railway Board and in individual Railway systems. Government servants' conduct rules have been amended so as to provide for periodical, or, on demand, returns for movable as well as immovable property acquired

by public servants. Procedures for departmental enquiries have been speeded up. In organisations under the Central Government which deal with the public, possibilities of corruption which current policies and procedures may provide are reviewed and a constant attempt is made to reduce them. To the extent delays in the disposal of cases and applications are an important source of corruption, the organisation and methods units are making efforts to tackle the issues involved.

4. In the States also the problems of corruption in large Government projects as well as at the points at which the administration comes into contact with the citizen have claimed continuous attention. Almost all State Governments have organised anti-corruption departments and set up special police establishments. At district headquarters also in a number of States, special anti-corruption committees have been constituted and have been helpful in dealing with the problem. Procedures have been prescribed for entertaining applications and representations from the public. A number of States have taken steps similar to those at the Centre, as for instance, the amendment of Government servants' conduct rules for obtaining periodical returns of movable and immovable property, the speeding up of departmental enquiries and the establishment of vigilance units.

5. There is no ready means of assessing whether or in what directions corruption has increased or diminished since the beginning of the first five year plan. Undoubtedly, any evidence of corruption arouses deep public anxiety. Where there has been suspicion or proof of lack of integrity in certain large projects or in other spheres of activity, disciplinary action has been taken either departmentally or before courts. It is clear, however, that close control and continuous vigilance and supervision on the part of all concerned at higher levels are needed to ensure that high standards of integrity are maintained throughout the administration.

ECONOMY

6. It was pointed out in the First Five Year Plan that the principal source of wasteful expenditure lay in the failure to plan carefully and in detail in advance of execution. As was emphasised in the Plan, economy must be inculcated among all public servants as a habit of mind and from time to time in every organisation there should be systematic reviews of expenditure. Financial procedures should be so devised as to secure, on the one hand, adequate control and, on the other, to avoid too great an interference with administrative authorities in carrying out their programmes in due time and in a responsible manner. On the whole it may be said that in all sectors of development included in the Plan there is scope for more careful working

out of estimates of financial costs and for a more critical assessment of results in relation to the expenditure incurred. In respect of non-development expenditure also there is need for greater attention to the canons of economy and austerity. Like efficiency, the process of achieving economy is a continuous one and there is need for increasing vigilance, supervision and control. An important step taken in this direction is the decision to set up, towards the end of the plan period, a Committee on Plan Projects which is a committee of the National Development Council.

EFFICIENCY

7. The problem of efficiency in administration may be considered from different points of view such as the training of personnel and the building up of cadres, improvement of methods of transacting business and the strengthening of administrative structures. It was pointed out in the First Five Year Plan that at the Centre there should be provision for obtaining enough persons with the necessary experience and qualifications (a) to undertake work in connection with the framing of economic policy and the study of economic problems, and (b) to manage public enterprises in the field of industry or to handle executive duties relating to the regulation and control of trade and industry. Towards the end of the plan period, action on three suggestions which were made in the First Five Year Plan was initiated. These were (1) drawing into the administrative service individuals with high academic qualifications or special experience, (2) selection of junior officers of the administrative service at an early stage in their careers for intensive training in the economic field and, (3) obtaining for responsible senior positions in Governments, individuals with special experience and knowledge from other fields. Towards the end of the plan period the questions of supplementary recruitment to the cadre of the Indian Administrative Services and the organising of two Pools at the Centre, one for work broadly of an administrative nature and the other for work in the economic and development field were being considered.

8. When the First Plan was formulated a scheme for an industrial management cadre was under consideration. This took considerable time to mature and eventually, soon after the completion of the first plan, the Central Government announced its decision to constitute the Industrial Management Pool. The Pool is intended to meet the needs of Ministries concerned with industrial undertakings such as the Ministries of Commerce and Industry, Steel, Mines and Fuel, and Transport and Communications.

9. In the closing years of the plan shortages of engineering and technological personnel were observed in several fields. It was realised that the demand for engineering personnel would increase

greatly during the second five year plan. As it took several years to train an engineer, it was necessary to undertake long-term planning for the provision of training facilities. In the latter part of 1955, the Planning Commission therefore constituted the Engineering Personnel Committee for examining the entire question of the demand for engineering personnel in relation to supply keeping in view the requirements of the second and the third five-year plan. The recommendations of the Committee have been the basis for further proposals. The shortages of engineering and scientific personnel drew attention to the larger problems of manpower planning. Towards the end of the plan, the need of providing overall guidance and coordination in matters of policy affecting technical personnel was recognised.

10. In the States, as a result of programmes under the First Plan, members of State Administrative Services were often called upon to assume duties, which were both novel and complex. In the face of these, the need for strengthening the State administrative cadres, which included about 3000 officers at the end of the first plan, was generally recognised. Steps in this direction were taken by some States towards the end of the plan period and further proposals were under consideration in connection with the implementation of programmes included in the Second Five Year Plan. In the First Plan, a proposal had been made that for fields of technical development such as agriculture, engineering, forests, public health and others, the Central Government should establish Central development cadres in which the States could participate. This proposal did not take practical shape and attention has been drawn to it afresh in the Second Five Year Plan which stressed the need for supplementing recruitment to State cadres by arrangements such as all-India services, joint development cadres or other cooperative arrangements between the Centre and participating States. Without these, it was felt that it would be difficult to obtain personnel of high quality in adequate numbers to cope with new and increasing needs.

11. Growth in the magnitude and complexity of Government's business and the need for quick decisions have led to greater attention being given in recent years to organisation and methods. At the Centre an Organisation and Methods Directorate was set up in the Cabinet Secretariat. The Directorate guides and coordinates the work of small organisation and methods units in the various Ministries and attached offices. The Ministry of Railways have set up an efficiency bureau for investigating special problems with a view to effecting savings in their programme. Problems of administrative efficiency with special reference to methods and procedures have been studied during the first five year plan in several States and

there has been a degree of reorganisation between secretariat departments and attached offices at State headquarters. A few States have also set up organisation and methods units.

12. The assumption of new functions and responsibilities by the Central Government has led in recent years to the creation of several new types of organisations. These fall broadly into the following groups:

- (1) Companies for industrial undertakings;
- (2) Control Boards for river valley projects either where the projects are of an inter-State character or where they involve large investment by the Centre;
- (3) Corporations for specific purposes such as the National Industrial Development Corporation, the State Trading Corporation, the Employees' State Insurance Corporation, Small Industries Corporation and others;
- (4) All-India Boards for Khadi and Village Industries, Handloom, Handicrafts, etc., the Social Welfare Board, and others;
- (5) Councils at the national level for subjects falling largely within the sphere of the States such as the All-India Council of Technical Education, the All-India Council of Secondary Education etc.
- (6) 'Central Committees' for community projects and land reform, a Coordination Board of Ministries of Irrigation and Power etc.

An evaluation from the administrative point of view of each of these forms of organisation in the light of the experience gained would now be useful, especially in the case of organisations such as Boards and Councils which function largely through grants to States or State organisations for which purpose funds are made available by the Central Government.

DISTRICT ADMINISTRATION

13. One of the aims of the national extension service is to transform the character of district administration. The orientation towards planning and development, the fact that the village level worker provides the various development departments an agency which can reach every village effectively and the coordination achieved between the departments, are important developments in district administration. There is a close connection between district planning and planning at the State level, and coordination in the district between development officers assumes equal coordination between development departments at the State level, an aspect to

which greater attention might well be given. Little progress has, however, been made during the first five year plan in giving to local bodies the role in implementing development programmes which had been envisaged for them in the scheme of the district plan. This subject has been reviewed at some length in chapter VII of the Second Five Year Plan where, in the light of recent experience, further proposals have been made.

14. It was suggested in the First Five Year Plan that with increase in district work and some decline in the quality of district administration there was need for greater inspection, supervision, guidance and training. These could be provided by senior administrative officers in charge of regions or groups of districts. The need for such officers became greater as the volume of business at State headquarters increased, departments and agencies multiplied and at the district level new burdens fell on officers with insufficient experience. On the whole it may be said that the practice of abolishing posts of regional officers which was gaining ground in many States a few years ago has been discontinued and generally steps have been taken or envisaged for strengthening administration at the regional level.

VILLAGE PANCHAYATS

15. It was stressed in the First Five Year Plan that progress in rural development depended largely on the existence of an active organisation in the village which represented the community as a whole and could bring the people together in common programmes to be carried out with the assistance of the administration. In other words, the village panchayat was to be the foundation of the entire administrative structure for national development. During the plan period the number of village panchayats increased from 83,093 in 1950-51 to 117,593 in 1955-56. In some States, as in Punjab, Uttar Pradesh and Mysore, every village was served by a panchayat. While a number of panchayats provided good leadership, invariably panchayats were handicapped on account of insufficient experience of development activities. The idea of the village panchayat being given the opportunity to share fully, along with the village co-operative, the responsibility for social and economic activities of the village community has not been achieved to any extent. On the other hand, numerous examples can be cited in which village panchayats organised their members for contributing voluntary work for the building of roads, planting of trees, and other works of interest to the community. The resources of panchayats continued generally to be in an unsatisfactory state. Several States, however, made available varying proportions of the land revenue of the village to the panchayat. In Bombay this proportion was 30 per cent; in the

Punjab 20 to 33 per cent, in Mysore 12 per cent, and so on. In the Punjab, as a result of the consolidation of holdings, about 4·6 lakh acres of land were transferred into community ownership with a view to providing resources to panchayats for village development.

PLANNING MACHINERY

16. During the first five year plan all States set up planning units at State headquarters. These consisted invariably of whole-time or nearly whole-time secretaries in charge of planning and development, many of whom also held executive responsibilities for national extension and community projects. Suggestions have been made in the Second Five Year Plan for strengthening planning machinery in the States, especially in relation to the statistical and economic work and the wider view of development in the States which is now required. At the district level States have generally constituted district development committees which associate representatives of the district in Parliament and in the State Legislatures, representatives of the district boards and the principal municipal bodies as well as leading non-official workers, with the formulation of development programmes in the districts. In the Second Five Year Plan the importance of creating a democratic structure of administration in the district has been stressed. In such a structure village panchayats would be linked organically with popular organisations at higher levels and, by stages determined in advance, the entire general administration and development of an area barring certain limited functions such as law and order, administration of justice and certain functions pertaining to revenue administration would become the responsibility of a democratic body. This subject is being studied by a team appointed by the Committee on Plan Projects.

STATISTICS, RESEARCH AND EVALUATION

17. The steps taken during the first five year plan to develop the apparatus of statistical information, arrange for research through universities and other institutions into social, economic and administrative problems of national development, and organise systematic evaluation of the rural community development programme have been described fully in Chapter XII—Research and Statistics for Planning in the Second Five Year Plan.

PUBLIC CO-OPERATION AND PARTICIPATION

18. A detailed account of the measures taken to develop public co-operation and participation during the first five year plan has been furnished in Chapter VI of the Second Five Year Plan. Besides national extension and community projects, these include programmes for utilising voluntary labour in rural areas, youth camps

and labour service on the part of students, planning forums in universities and educational institutions, the contribution made by voluntary organisations like the Bharat Sevak Samaj and others, the programmes initiated by the Central Social Welfare Board and the local development works programme. The efforts made to create an informed understanding of the significance of planning for the development of each area have also been described in the Second Five Year Plan. In view of its special character, a short account, however, may be given here of the working of the local development works programme.

19. The object of the local development works programmes, for which the plan made a provision of Rs. 15 crores, was to provide opportunities to local people with some assistance from Government, to contribute through voluntary labour and in other ways towards works designed to meet felt local needs. The programme was to be undertaken especially in those areas in which other development programmes such as community projects could not yet be provided. The Central Government agreed to provide for each work upto a maximum of Rs. 10,000, subject to an equal contribution being found within the State from the resources of the people, the State Government and local bodies. Grants were to be made available for works relating to water-supply, rural sanitation, village roads including small bridges and culverts, improvements to school or dispensary buildings, construction of godowns and permanent agricultural improvements. They were allocated on a population basis to all States. The programme got under way towards the end of 1953-54 and out of 1,99,000 works approved by State Governments, at the end of the Plan, 66,000 works had been completed and about 100,000 works were in progress. The total expenditure on the programme during the plan period was about Rs. 12 crores.

20. The works carried out under the programme being spread all over the country, it was difficult to obtain a clear appraisal of the working of the programme. Accordingly, in December 1955 the Planning Commission arranged for three evaluation teams, each consisting of an administrator and an engineer, to inspect at site nearly 600 works spread over 50 districts chosen on a random sample basis and situated in 12 different States. Generally, the teams observed that the programme had evinced considerable interest and had helped to bring about improvements in rural conditions. The teams also brought to light some of the defects in organisation and procedures which had been found in many States. These were (1) failure to prepare plans and estimates, (2) want of adequate scrutiny of individual schemes, (3) in some cases use of contractors for the execution of works without direct public participation, (4) inadequate arrangements for maintaining village roads and other works

financed from the grants, and (5) failure to maintain satisfactory records and accounts in respect of public contributions. The Planning Commission brought these defects to the attention of the State Governments concerned so that they could take the necessary remedial action.

CHAPTER XVIII

PROGRESS OF LAND REFORM

THE general framework of a national land policy was set out for the first time in the First Five Year Plan. The approach of the Plan was based on the recognition that the future of land ownership and cultivation was a fundamental issue in national development and that, to a large extent, the pattern of economic and social organisation would depend upon the manner in which the land problem was resolved. The object of land policy was to bring about suitable changes in the structure of the rural economy which would at the same time, promote rapid agricultural development. It was of course realised that while broad principles and directions of policy could be indicated, the form and manner of their application and the adaptations needed would differ in different parts of the country. There was need, however, for a broad common approach in land reform programmes and for determining the stages in which they were to be carried out.

2. In the First Five Year Plan the problems of land reform were viewed from the point of view of agricultural production as well as from the point of view of different interests in land. Both aspects were important because it was only in an economy in which production and employment expanded that the community could take full advantage of changes in the social and economic structure. The main interests involved were (1) intermediaries, (2) large owners, (3) small and middle owners, (4) tenants-at-will, and (5) landless workers. In regard to each the Plan made a number of suggestions which together provided a picture of the future agrarian economy.

ABOLITION OF INTERMEDIARIES

3. Abolition of intermediaries had begun prior to the first plan, but the greater part of the task has been accomplished during the past five or six years. About half the agricultural area was held under intermediary rights. A few States had taken up the enactment of suitable legislation for the abolition of these rights before 1951. In Madras (including Andhra) legislation had been enacted and partly implemented between 1948 and 1951. In Hyderabad jagirs had been resumed in 1949. In other States, most of the work relating to the enactment and implementation of the law was taken up during the period of the first five year plan. In a number of:

States the validity of the legislation enacted for the abolition of intermediaries was questioned in law courts on behalf of intermediary interests and the Constitution was amended in 1951 to facilitate further progress. By the end of 1954-55, the programmes of abolition of intermediaries had been generally completed in Andhra, Bombay, Madras, Madhya Pradesh, Punjab, Uttar Pradesh, Madhya Bharat, Saurashtra, Bhopal and Vindhya Pradesh. It was also implemented though not fully, in Assam, Bihar, Orissa and Rajasthan. The main developments during 1955-56 were: (a) the completion of acquisition of zamindaries in the remaining 9 districts of Bihar (zamindaris in the other 8 districts had been taken over earlier), (b) enforcement of the legislation in West Bengal, where all estates were taken over in April 1955, (c) the adoption and partial implementation of legislation for the abolition of inam tenures in Mysore, *Edvagai* estates in Travancore-Cochin and *Istamrari* (permanently settled) estates and jagirs in Ajmer, and (d) the enactment of legislation for abolition of intermediaries for the hilly areas of Jaunsar Bawar (U.P.). The implementation of the Himachal Pradesh legislation was held up on account of writ petitions of intermediaries which are still pending in the Supreme Court. Thus, by the end of the first plan period intermediaries have been abolished almost entirely throughout the country, but a few pockets remain where action is still needed.

4. The compensation payable for the acquisition of intermediary interests has been estimated at about Rs. 615 crores. This includes Rs. 379 crores for compensation, Rs. 86 crores for rehabilitation grants and Rs. 150 crores for interest payments. In addition, there are annual payments to be made to religious and charitable institutions whose estates were brought under State management. Of the total amount, Bihar accounts for about Rs. 240 crores, Uttar Pradesh for about Rs. 178 crores, West Bengal for Rs. 59 crores and Rajasthan for Rs. 36 crores. These four States together account for Rs. 513 crores, that is, for about 83 per cent of the total amount of compensation. In determining the rates of compensation, two principles were kept in view, namely,

- (1) the total compensation should be financed out of the increase in revenues accruing to State Governments on the abolition of intermediaries; and
- (2) intermediaries in the lower income groups (who constitute the vast majority) should get adequate compensation.

Compensation has been fixed generally as a multiple of the net income accruing to an intermediary at the time of acquisition of his interest. This multiple was higher in the case of intermediaries

in the lower income groups. In some States where compensation was fixed as a uniform multiple of net income, a provision was made for payment of rehabilitation grants to intermediaries with small incomes. Thus, in Uttar Pradesh the compensation amount (including the rehabilitation grant) varied between 8 and 28 times the net income and in Bihar between 3 and 20 times the net income. A considerable part of the compensation amount is payable to small proprietors. According to one estimate nearly two-fifths of the compensation amount would be payable to intermediaries entitled to Rs. 5,000 or less of compensation. Compensation is payable in cash or in bonds. In Andhra, Madras, Madhya Pradesh, Orissa, Hyderabad, Madhya Bharat, Saurashtra, Bhopal and Vin-dhya Pradesh, compensation was to be paid in cash instalments. In Bihar, Uttar Pradesh, West Bengal and Rajasthan, where the liability was large, compensation took the form of bonds. In Bihar, Uttar Pradesh and Rajasthan it was decided to make the bonds both negotiable and transferable. In West Bengal, the bonds were not negotiable. Generally, bonds have to be redeemed in equated instalments over varying periods—40 years in Bihar and Uttar Pradesh, 20 years in West Bengal and 15 years in Rajasthan.

5. The assessment of compensation payments has been a long and complex process. In States like Assam, Bihar, Orissa and West Bengal, where due to permanent settlements, up-to-date records were not available and the necessary revenue machinery did not exist, the task has been particularly difficult. In Bihar the assessment of compensation is not likely to be completed until 1960-61. The total compensatory payment made so far amounts to Rs. 67 crores of which Uttar Pradesh accounts for Rs. 44 crores. A provision has been made, however, in almost all States for payment of *ad interim* or advance compensation.

6. On the abolition of intermediaries large areas of forest and waste lands and other properties came to be vested in the State Governments. Their efficient management and development presents a problem which still needs considerable attention.

7. Temporarily settled areas had the advantage of possessing more or less adequate revenue administrations. While these had to be strengthened to cope with increased responsibilities, consequent on the abolition of intermediaries, the speedy enforcement of the new legislation presented no serious difficulty. On the other hand, in permanently settled areas and jagirdari areas there were scarcely any established revenue administrations and records-of-rights were either out of date and defective or were not maintained at all. The task of taking over zamindaries was thus a formidable one and the abolition of intermediaries was consequently delayed.

In the First Five Year Plan it had been stressed that in the absence of adequate revenue administration and land records, implementation of measures of land reform might even give rise to problems which would come in the way of proper implementation. There has been progress in several States in solving the administrative problems which arise from the abolition of intermediaries. For instance, in Bihar, where the State has been divided into 597 *anchals* and each *anchal* into 10 *halqas*, 5970 *karamcharis* (*halqa* in-charge), 597 revenue inspectors and 597 *anchal adhkari*s were recruited, trained and posted. The record-of-rights is being reconstructed by a quick village to village survey, which has been completed in 51,000 out of 70,000 villages. In West Bengal the revision of the record-of-rights has been undertaken over the entire State and is expected to be completed by the end of 1957-58; the revenue administration is also being established. In Rajasthan a quick survey was taken up and almost completed all over the State, and the *patwari* agency has been set up.

3. The most important aspect of land reform programmes during the first five year plan concerned the regulation of relations between owners and tenants. The Plan considered separately the position of substantial owners of land, of middle and small owners and of tenants-at-will. In regard to substantial owners of land, the Plan favoured the principle that there should be an upper limit to the amount of land that an individual might hold. Immediately it recommended a limit for future acquisition and also a limit for resumption for personal cultivation. As regards the question of imposing a ceiling on existing holdings, a distinction was made between land under the cultivation of tenants-at-will and that under the direct management of owners. For lands with tenants-at-will, it was proposed that such tenants should be enabled to become owners of land they cultivated. As regards lands under the direct management of owners, while the principle of imposing an absolute ceiling was accepted, it was recommended that the actual ceiling should be fixed after undertaking a special census of land holdings and cultivation and with reference to the agrarian history and conditions of different States. In the case of small and middle owners, an attempt was made to take a fair view between their claims and those of tenants. Resumption of land from a tenant was to take place only for personal cultivation and that also within a limited period. It was suggested that in future the period of tenancy should ordinarily be 5 to 10 years and should be renewable. Reduction in rents to one-fourth or one-fifth of the produce was also recommended. From the operational aspect these were among the principal proposals in the land reform programme set out in the First Five Year Plan.

9. Tenancy legislation in India has a long history. Much of it related, however, to the conferment of security of tenure and the regulation of rents payable by tenants of intermediaries. In ryotwari areas, where legislation regulated the relations between land owners and cultivating tenants, its practical effect was to safeguard the rights of the former and to deny any thing in the nature of a permanent right to the latter. On the eve of the first five year plan, with some exceptions, tenants of land owners in the ryotwari areas and sub-tenants of intermediaries in other areas enjoyed very limited protection indeed. This is the background against which considerable legislative activity which marked the first five year plan has to be viewed. As will be seen, there have been gaps and weakness in the implementation of the new legislation, but the recognition of this fact and the enforcement needed was essentially a matter of time and organisation.

10. In Bombay, Punjab, and Hyderabad tenancy laws went through several amending enactments, in Bombay in 1953 and 1956, in the Punjab in 1951, 1953 and 1955 and in Hyderabad in 1954 and 1956. Pepsu adopted a tenancy law in 1953 which was considerably modified in 1956. Uttar Pradesh had included provisions of tenancy reforms in its Zamindari Abolition and Land Reforms Act of 1950 which was amended in 1954 to bring all tenants and sub-tenants into direct relationship with the State. West Bengal had included provisions for tenancy reform both in the Estates Abolition Act, 1953 and in the Land Reforms Act, 1955. In Rajasthan where ejectments had been halted temporarily since 1949 a comprehensive tenancy law was enacted in 1955 and later amended in 1956. Delhi and Himachal Pradesh adopted land reform legislation of a fairly advanced character. Legislation for temporary stay of ejectment of tenants was also adopted in several other States.

SECURITY OF TENURE

11. In Uttar Pradesh and Delhi all tenants and sub-tenants have been given permanent rights. In Uttar Pradesh tenants were brought into direct relationship with the State but they had to pay for acquiring bhumidari rights. In Delhi, the law provides for conferment of ownership on all tenants and sub-tenants who are required to pay compensation at rates varying from 4 to 40 times the land revenue in instalments spread over 10 years. In Bombay, Punjab, Rajasthan and Himachal Pradesh security of tenure has been conferred on tenants subject to the landlord's right to resume

land for personal cultivation. Tenants, however, retain a minimum holding or a portion of their holdings as follows:—

Bombay	Tenants retain half the area.
Punjab and Pepsu	Tenants retain 5 standard acres from which they can be ejected only when alternative land is provided by the State Government.
Rajasthan	Tenants retain a minimum holding with a net income of Rs. 1,200 (exclusive of the cost of the labour and the labour of family)
Himachal Pradesh	Tenants retain three-fourths of the area.

Subject to the conditions mentioned above the landlords, right to resume land for personal cultivation is limited in Bombay to 3 'economic holdings' (12 to 48 acres), in the Punjab and Pepsu to 30 "standard acres", in Rajasthan to the area in excess of the minimum holdings to be left with the tenants and in Himachal Pradesh to an area of 5 acres.

In Hyderabad the limit was placed at 3 family holdings (12 to 180 acres depending upon the class of land). Where the owner held less than a basic holding he was entitled to resume the entire area. In other cases, the tenant was to be left with a minimum area equal to a basic holding or half the leased area whichever was less.

In the following States a limit has been fixed on the area which a land owner may resume for personal cultivation:

Assam :	33-1/3 acres.
Berar :	50 acres.
(Madhya Pradesh)	
Orissa :	7 to 14 acres.
Jammu & Kashmir :	2 to 6 acres.
Kutch	50 acres.

In other States, the position is as follows:

Bihar:	Under-raiyats (including bataidars) are of three classes:— <ol style="list-style-type: none"> (1) Occupancy under-raiyats who have been in continuous possession of land for 12 years. (2) Under-raiyats admitted on a written lease. (3) Under-raiyats admitted on an oral lease. Occupancy under-raiyats have permanent rights. Under-raiyats admitted on a written lease are liable to ejectment on the expiry of the period of lease. Under-raiyats admitted on an oral lease are not liable to ejectment except for failure to pay rent or rendering the land unfit for cultivation or for breach of certain conditions.
Madhya Pradesh (excluding Berar)	Occupancy rights accrue in lands habitually leased out, that is in land leased for three years in a consecutive period of 5 years.
West Bengal:	Cash rent tenants (under-raiyats) have been brought into direct relationship with the State. With regard to crop sharers (bargadars) the law is that a landlord may resume 2/3 rds of the area. If he owns less than 7 1/2 acres, he may resume the entire area.

- Mysore: . . . Tenants holding land for 12 years or more get permanency of tenure generally in half the area held under tenancy. Ejectment of other tenants has been temporarily stayed.
- Saurashtra: . . . In Saurashtra, the problem was mainly of tenants of intermediaries who have generally been given ownership. Tenancies of ryotwari holdings are not regulated. In future leasing out of land is not permitted.
- Ajmer: . . . In intermediary areas, sub-tenants in continuous possession for three years or more have become owners. In Khalsa area, tenants get occupancy rights in lands which are classified as "Stable" lands. Sub-tenants continue to hold land at will.
- Vindhya Pradesh . . . The law provides for security for a minimum period of 7 year for all sub-tenants.

Pending enactment of comprehensive legislation ejectment of tenants and sub-tenants has been temporarily stayed for varying periods prescribed by law in Andhra, Madras, Madhya Bharat, Travancore-Cochin (where tenants other than crop-sharers only are protected), Bhopal, Coorg and Manipur.

12. Apart from delays in undertaking legislation needed for the protection of tenants and variations in the rights offered to them in different States, frequent changes in detail in the legislation which was enacted and the complex rules which followed the legislation tended to some extent to defeat the objects of land reform. In many of the tenancy laws resumption was permitted only on grounds of personal cultivation but, owing to difficulties of definition no less than that of enforcement, it would appear that considerable resumption of lands took place. Sometimes this took the form of so called "voluntary surrenders." Although the area which a land owner could resume was limited, in several States demarcation between the resumable and the non-resumable areas did not take place within a prescribed period, so that the security afforded to the tenant remained incomplete. The experience of the first five year plan emphasises the importance of efficient administration of land reform legislation and of informed and well-organised public opinion in every local community. Generally speaking also, it is difficult for the tenants to establish their rights.

REGULATION OF RENTS

13. The proposal in the First Five Year Plan was that a rate of rent exceeding $\frac{1}{4}$ th or $\frac{1}{5}$ th of the produce should be regarded as requiring special justification. Provisions for the scaling down of rents have been adopted in several States. Variations in the rates fixed in different States are, however, wider than can be explained in terms of objective, economic and social conditions. In Assam, the crop-share rent was reduced from $\frac{1}{4}$ th to $\frac{1}{5}$ th of the produce; in Bombay from $\frac{1}{3}$ rd of the produce for dry lands and $\frac{1}{4}$ th of

the produce for irrigated lands to 1/6th for all types of lands; in Orissa from 1/2 to 1/4th; in Hyderabad from 1/3 for irrigated land and 1/4th for dry lands to 1/4th and 1/5th respectively. In Rajasthan rent was first reduced to 1/4th and then to 1/6th of the produce. In Mysore it was fixed at 1/2 the produce in 1952 and later, reduced to 1/3rd for Maidan areas and 1/4th for Malnad areas. In Delhi and Himachal Pradesh where rents were not regulated earlier, the maximum rent was fixed at 1/5th and 1/4th of the gross produce respectively. Similarly, in Punjab (including Pepsu) the maximum rent was fixed at 1/3rd of the gross produce and in Bihar at 7/20th of the produce. In Madras rent regulation was applied in the first instance in Tanjore district where rent was fixed at 60% of the gross produce; in 1955-56, rent regulation was extended to the entire State and the maximum rent was reduced and fixed between 33-1/3% and 40% of the gross produce. In Andhra the rent has been fixed at 1/2 of the gross produce. In Jammu and Kashmir, it varies between 1/2 and 1/3rd of the gross produce.

14. The enforcement of provisions for the reduction of rent has presented several difficult problems. The difficulties encountered are similar to those that hinder the enforcement of provisions for security of tenure. It is well-known that rent regulation cannot be effective unless it is accompanied by security of tenure. It has also been observed that regulation of crop-share rents is difficult to enforce. In some States, therefore, as in Bombay, and Hyderabad, a provision has been made for fixation of maximum rent as a multiple of land revenue.

OWNERSHIP RIGHTS FOR TENANTS

15. In 13 out of 27 States (obtaining prior to reorganisation of States) legislation provides for the conferment of ownership rights on tenants. The legislation adopted in these States follows two different patterns. In Uttar Pradesh and Delhi all tenants and sub-tenants were brought into direct relation with the State. In Uttar Pradesh no compensation was payable by tenants, the State undertaking responsibility for paying compensation to landlords out of rents recovered from the beneficiary tenants. In Delhi, compensation is to be recovered from tenants who would be required to pay the land revenue to the State. In all other States the right took the form of an option to purchase. In two States, namely, Hyderabad and Himachal Pradesh, the State Governments assumed powers to confer ownership on tenants in any area through the issue of a notification. The Hyderabad Government have enforced this legislation in selected areas but in Himachal Pradesh on account of writ petitions filed on behalf of landlords in the Supreme Court, the legislation has not yet been implemented.

16. The tenant's right of purchase relates naturally to areas which a land owner cannot resume even on grounds of personal cultivation. In some States there are other restrictions also. Thus, in Hyderabad, the right is available only to protected tenants, and in Madhya Pradesh only to occupancy tenants. In the Punjab only such tenants of non-resumable areas have been permitted to purchase as have been in continuous possession for 6 years. As a rule, where the right of purchase is optional, it can be exercised at any time at the discretion of the tenant. In two States, however, (Bombay and Madhya Bharat) it has been stipulated that the right must be exercised within a prescribed period. In Bombay it is further provided that if a tenant fails to exercise his right of purchase by April, 1957, he shall become liable to ejectment.

17. The provisions relating to fixation of compensation payable by tenants for acquisition of ownership vary from State to State. Except in Punjab where it has been fixed at $\frac{3}{4}$ ths of the average market value, compensation has to be determined generally as a multiple of rent or land revenue. In seven States it is fixed as multiple of rent. The multiples vary widely. In Madhya Pradesh the multiple varies between 7 and 10, in Uttar Pradesh the multiple is 10; in Hyderabad it varies between 6 and 15 and in Madhya Bharat between 2 and 8 (of the net income of the landlord); it is 10 in Rajasthan (for un-irrigated lands), 12 in Ajmer and 15 in Vindhya Pradesh. In four States compensation is fixed as a multiple of assessment—20 to 200 times the assessment in Bombay, 90 times the assessment in Pepsu, 4 to 40 times the assessment in Delhi and 48 times in Himachal Pradesh. Compensation is generally payable in instalments (except in Madhya Pradesh) spread over a period varying between 5 and 15 years.

18. It has been observed in practice that an optional right of purchase is seldom exercised. In Uttar Pradesh and Saurashtra, large bodies of tenants of intermediaries were persuaded to acquire ownership on payment of compensation. Their success was mainly due to two factors. Firstly, the State Government organised administrative drives to induce tenants to become owners. In Saurashtra the State Government also provided credit facilities through the land mortgage bank to enable tenants to acquire ownership rights. This led to the diversion from other heads of a sum of Rs. 2 crores to the land purchase programme.

19. Judged by the amount of land purchased by tenants and the number of tenants who have been able to acquire ownership rights, the steps described above cannot be said to have produced significant results. Apparently, tenants do not wish to pay to become owners unless there are marked advantages to gain or disadvantages to

avoid. From the economic point of view, whether tenants should come into direct relationship with the State and pay for proprietary rights in instalments over a period or should continue to pay a small annual rent to the land owners while possessing permanent rights, remains a moot issue. Two questions have to be considered: first, to what extent the total real burden on the tenant will diminish and, secondly, to what extent resources which the tenant could apply to the improvement of land might be diverted to the purchase of ownership rights. In the Second Five Year Plan the view has been taken that tenants of non-resumable areas should be brought into direct relationship with the State, but the total burden, including land revenue and instalment payments towards purchase price, should not exceed the level of rent recommended in the Plan. The subject needs further study because of another limiting factor which has to be kept in view, namely, the condition that the aggregate amount of compensation and interest should be fully recovered from the tenant, so as to avoid placing an additional financial burden upon State Governments.

CEILING ON HOLDINGS

20. The approach to the question of fixing ceilings on agricultural holdings adopted in the First Five Year Plan has been explained in paragraph 8. As an immediate step in tackling the problem, it was proposed that farms of substantial size which are directly managed by their owners might be divided into two groups, namely, those which are so efficiently managed that their break-up would lead to a fall in production, and those which do not meet this test. State Governments should have the right to take over for purposes of management farms in the latter category in their entirety or such portion thereof as might be in excess of the limit.

21. The census of land holding and cultivation which was recommended in the First Five Year Plan as a step which would facilitate sound decisions on ceilings in each State, has been carried out in 22 States. In 10 States, namely, Andhra, Bombay, Madhya Pradesh, Madras, Hyderabad, Madhya Bharat, Saurashtra, Ajmer, Bhopal and Kutch, it was based on complete enumeration of holdings. In 7 States, namely, Punjab, Pepsu, Mysore, Coorg, Delhi, Himachal Pradesh, and Vindhya Pradesh, the census was based on complete enumeration, but was restricted to holdings of 10 acres or above. In 5 States, namely Uttar Pradesh, Bihar, Orissa, Rajasthan and Travancore-Cochin the census was based on sample surveys. In three States, namely, Assam, West Bengal and Jammu and Kashmir where decisions relating to ceilings were taken on the basis of data already available with the State Governments, the latter did not think it necessary to arrange for a fresh census. In Manipur and Tripura due to difficulties of communications and lack of personnel,

the proposal for a census was not pursued. The results of the census have now become available and will be shortly published in a separate volume.

22. Ceilings on future acquisitions of land have been fixed in the following States:—

Assam	. . . . .	50 acres.
Bombay	. . . . .	3 economic holdings (12 to 48 acres).
Uttar Pradesh	. . . . .	30 acres.
West Bengal	. . . . .	25 acres.
Hyderabad	. . . . .	3 family holdings (12 to 180 acres).
Jammu & Kashmir	. . . . .	22½ acres.
Madhya Bharat	. . . . .	50 acres.
Pepsu	. . . . .	30 standard acres (for displaced persons 40 standard acres).
Saurashtra	. . . . .	3 economic holdings.
Delhi	. . . . .	30 standard acres.

23. In regard to the ceiling on existing holdings, legislation has been enacted in a few States. Jammu & Kashmir had enacted legislation in 1949 which was implemented partly before 1951 and partly within the first plan period. The ceiling on existing holdings was the same as the ceiling on future acquisition. The land held by an owner in excess of the ceiling vested in the Government and no compensation was payable.

In Hyderabad, which enacted the necessary legislation in 1954, the ceiling was fixed at 4½ family holdings and applied to farms which were not so efficiently managed that their break-up would lead to a fall in production. There was also a provision for prescribing standards of efficiency of cultivation and management for holdings which exceeded 3 family holdings. The Government took the power to assume management of farms which did not conform to these standards either, in their entirety or such portion thereof as was in excess of 3 family holdings. Standards of efficiency were drawn up and published towards the end of October 1956, and have yet to be enforced. The Hyderabad legislation also included a provision that farms which did not consist of compact blocks would be presumed not to be so efficiently cultivated and managed that their break-up would lead to fall in production. In practice, of course, most of the substantial farms did not consist of compact blocks. Prior to reorganisation of States, preliminary steps were taken to enforce the provisions in selected areas and declarations were obtained

from the substantial holders indicating the lands held by them and the lands they wished to retain. The actual assumption of State management or acquisition of surplus lands was not, however, taken up when the reorganisation scheme came into force.

Himachal Pradesh also adopted legislation for ceilings on lines followed in Hyderabad, but in its special conditions the provision relating to compactness of farms was not repeated. The Himachal Pradesh Government has not so far prescribed the standards of cultivation and management. As writ petitions have been pending in the Supreme Court challenging the validity of the law, implementation has not been possible. The ceiling proposed is 30 acres in district Chamba and the area assessed to Rs. 125 in other districts.

The Punjab Government also took powers under its tenancy legislation to assume management of lands held by owners under personal cultivation in excess of 30 standard acres (50 standard acres in the case of displaced persons) for settling tenants who might be ejected when owners resumed land for personal cultivation as provided in the legislation. This provision does not apply to efficiently managed farms whose break up might lead to a fall in production. Rules have been framed and the standards of efficiency have been laid down. The implementation of the law has been taken up recently.

Immediately before the reorganisation of States Pepsu also enacted legislation for ceiling. The ceiling is 30 standard acres (in the case of displaced persons, 40 standard acres). In addition, a landlord is permitted to retain another area of 10 standard acres for planting an orchard. Farms which are so efficiently managed that their break-up would lead to a fall in production, have been exempted. The excess land is to be acquired by the State Government outright on payment of compensation. The implementation of the law has not yet commenced.

Legislation has been enacted for the imposition of ceilings in Assam and West Bengal. In Assam the ceiling is 50 acres and in West Bengal 25 acres. The ceiling applies to ownership as well as to personal cultivation. There is no provision for the exemption of efficiently managed farms in either State. In Assam, however, mechanised farms not exceeding $166\frac{2}{3}$ acres have been exempted from the ceiling. In both States the ceiling has yet to be enforced.

In Ajmer the ceiling has been fixed at 50 standard acres. There is no provision for exemption of efficiently managed farms. The ceiling in Ajmer applies only to land held by intermediary proprietors and not to ryotwari holdings.

In Bihar, a Bill providing for a ceiling at 25-75 acres was introduced and reported upon by a Select Committee, but has yet to be enacted.

Proposals for a ceiling were formulated in Travancore-Cochin (now Kerala) and a Bill was introduced, but was not enacted when the Legislature was dissolved in March, 1956.

24. In a number of States, where Bills have not been prepared or legislation enacted, the question of prescribing ceilings is engaging the attention of the State Governments. In States in which there has been legislation for ceilings, practical implementation has not proceeded beyond preliminary steps. It is clear that a far-reaching measure of land reform such as ceilings on holdings calls for considerable preparation, a clear view as to the agrarian structure and relations between different sections of the rural population which it is intended to bring into existence over the next few years and, at the same time, a programme for expanding production and employment opportunities within the rural economy. Sufficient time has not passed to permit of a judgement on the legislation already enacted in some States, but it would be desirable to study afresh the nature of the administrative and other problems which arise in carrying into effect a policy for ceilings on agricultural holdings and for resettlement on surplus lands.

CONSOLIDATION OF HOLDINGS

25. The progress made in the consolidation of holdings in Punjab, Madhya Pradesh and Bombay led to the recommendation in the First Five Year Plan that in all States programmes for the consolidation of holdings should be expanded and pursued with vigour. Consolidation of holdings has been advocated as a rural development programme since the early twenties, but on the whole, in several parts of the country progress has been meagre. In the early stages consolidation of holdings was undertaken on a voluntary basis through cooperative societies. This was followed by the introduction of an element of partial compulsion which enabled Government to undertake schemes of consolidation where a given proportion of landholders holding not less than a given proportion of the area of the village agreed to it. In Baroda, Madhya Pradesh, Punjab, Uttar Pradesh, Jammu & Kashmir, this approach was adopted. Since 1947, when Bombay enacted legislation enabling the Government to frame schemes of consolidation of holdings in any area on its own initiative, Punjab and Pepsu followed with similar legislation in 1948, Orissa in 1951, Uttar Pradesh and Himachal Pradesh in 1953, Rajasthan in 1954, West Bengal in 1955 and Bihar and

Hyderabad in 1956. The progress made in carrying out consolidation of holdings is shown in the statement below:—

State	(lakh acres) Area consolidated	
	In 1955-56	Upto 1955-56
Bombay	6.8	21.2
Madhya Pradesh	1.1	28.9 (up to 30th Sep. 55)
Punjab	6.5	48.1
Pepsu	5.3	13.7
Delhi . . . . .	..	2.0
Uttar Pradesh	Scheme extended to one tehsil each in 5 districts.	43.9 (Work is in progress in one tehsil each in 21 districts)

In other States relatively little was done.

26. Consolidation of holdings offers a solution of the problems of fragmentation. The latter is a continuing process and the main question has been to take steps both to consolidate existing fragments and to ensure that there is a minimum area below which new fragments are not created. Legislation for the prevention of fragmentation had been undertaken in Bombay, Punjab, Pepsu and Delhi before the commencement of the First Five Year Plan. During the plan period, Bihar, Hyderabad, Orissa, Rajasthan and Saurashtra were some of the States which enacted legislation regulating transfers and partition with a view to preventing break up of a holding or diminution in the size of a plot below a certain minimum. In several States legislative provisions for preventing fragmentation have not been enforced in practice. In the last year of the plan the Planning Commission commenced a special study of the problems of consolidation of holdings with the object of working out proposals which would facilitate more rapid progress in the field in association with the community development programme.

CO-OPERATIVE FARMING

27. In the First Five Year Plan co-operative farming was viewed as a method by which small and middle farmers could bring into existence sizeable farm units which would facilitate the application on a wider scale of scientific knowledge, increase in capital investment and rise in the productivity of land. It was, therefore, suggested that encouragement and assistance should be given to farmers to group themselves voluntarily into co-operative farming societies. The Ministry of Agriculture addressed State Governments in June

1953 suggesting the preparation of programmes for the development of co-operative farming through active assistance in formulating their plans, in supplies and by way of credit. In March, 1954, the Central Government offered to provide financial assistance towards the expenses of supervisory and administrative staff. While the practical response from State Governments in the form of proposals to be implemented was relatively small almost every State Government drew up its rules and bye-laws for cooperative farming societies and issued executive instructions. Generally speaking, State Governments were willing to provide a measure of financial assistance to groups of persons setting up co-operative farming societies.

28. At the end of the plan period there were 1397 co-operative farming societies, of which 262 were organised during 1955-56. Out of the total number of societies, Bombay accounted for 342, Punjab for 289, Uttar Pradesh for 162, Rajasthan for 76, West Bengal for 75, and Pepsu for 58. A fair proportion of these co-operative farming societies were genuine and were composed of persons who, given the necessary guidance and help in the solution of new and difficult problems, could achieve a measure of success. There were others in which the main object of those who got together into co-operatives, was to escape the incidence of tenancy legislation. At the instance of the Panel of Land Reform of the Planning Commission, which considered the land policy for the second five year plan, the Programme Evaluation Organisation undertook studies of 22 selected co-operative farming societies in different States. These have been recently published. Analysis of the experience gained in these and other co-operative farming societies will be helpful in devising measures for avoiding defects which have been observed, evolving suitable methods of payment for work as well as for the land contributed by individual members and developing incentives for efficient co-operative cultivation and managements. Apart from difficulties inherent in co-operative farming, the principal handicap so far has been the lack of adequate organisation for planned experiments and for studying the experience and problems of co-operative farming societies which have been constituted voluntarily in several States. A sum of Rs. 40 lakhs was provided under the First Five Year Plan for carrying out experiments in co-operative farming; the bulk of the provision was not utilised.

RESETTLEMENT OF LANDLESS AGRICULTURAL WORKERS ON LAND

29. As a contribution towards the rehabilitation of landless agricultural workers, the Plan provided Rs. 2 crores for land resettlement schemes. It was proposed that blocks of newly reclaimed land as well as culturable waste land should be set apart wherever possible for the settlement on cooperative lines of groups of landless agricultural workers and of those who had small and uneconomic

plots of land. It was recognised that the amount of land which could be thus made available would be limited and the proportion of agricultural workers who could be benefited would be small, but it was felt that within the scope of the programmes included in the Plan there was considerable opportunity for organising cooperative settlement and colonisation schemes for agricultural workers and, as a matter of policy, the fullest possible use should be made of these possibilities.

30. Early in 1954, the Ministry of Food and Agriculture addressed State Governments enquiring whether they had available blocks of land from 5,000 to 10,000 acres suitable for settlement, whether they would like such lands to be used for setting up central mechanised farms for the purpose of resettlement of landless labour or whether they had other proposals for settlement of landless labourers on a cooperative basis or otherwise. The response was small. Meanwhile, in September 1953, the Central Government had started a Central mechanised farm in Bhopal of 10,000 acres on which 1,000 families of landless workers were expected to be settled over a period of three years. The landless workers were to be drawn partly from Bhopal and partly from other States. The scheme for a mechanised farm in Bhopal was not originally put forward with the object of settling landless labourers but was linked to this purpose at a later stage. By the end of 1954 it was recognised that the setting up of mechanised farms did not provide an appropriate pattern for settling landless agricultural workers. Instead, the pattern which came to be favoured was that proposed in a scheme for the settlement of landless persons drawn up by the Uttar Pradesh Government for the Lakhimpur-Kheri and Pilibhit districts. In May 1955, the Ministry of Food and Agriculture informed State Governments of its readiness to give financial assistance for suitable schemes, for resettling landless workers. The Central Government was willing to share the net expenditure involved on land reclamation, lay-out, provision of tenements for settlers, special measures such as for combating malaria, provision of communal amenities, administrative and other staff required for a period of 2 to 3 years and buildings required for the housing of staff. For certain other purposes such as provision of irrigation, communications, etc., loans were offered. The Ministry of Food and Agriculture informed States that it was not intended that any attempt should be made to link up colonisation of this type with schemes for cooperative farming but, as far as possible, the purchase, sales and services in connection with colonisation schemes should be encouraged on cooperative lines. For other requirements it was to be left to the colonists themselves to decide whether they would like to proceed on cooperative lines or on their own.

31. The provision of Rs. 2 crores made in the Plan was scaled down to Rs. 1.5 crores and the amount spent was less than Rs. 1 crore, about two-thirds of the expenditure being incurred in the districts of Lakhimpur-Kheri and Pilibhit in Uttar Pradesh and about a third on the Central mechanised farm at Bhopal. A few small schemes were also supported in Andhra. In Madras, Andhra and Mysore, during the years following the end of the second world war, a number of resettlement schemes for ex-servicemen were taken up and these have since been continued. Taking the plan period as a whole, it must be admitted that the expectations in the First Five Year Plan in regard to resettlement schemes for landless labourers were not fulfilled. There is need now to study more carefully the experience which has been gained in several States and also in the Bhoodan areas. In any programme for improving the economic conditions of landless agricultural workers, land resettlement schemes have a value which is out of proportion to the numbers of workers rehabilitated on land or the area transferred to them. It is, therefore, of the utmost importance that patterns of resettlement for agricultural workers should be evolved on the basis of recent experience which will be sound in conception, economic in terms of cost and readily adaptable to widely varying local conditions.

32. In the First Five Year Plan it was pointed out that schemes of land redistribution were likely to confer somewhat restricted benefits upon agricultural workers other than tenants because in the ordinary course the first claim would be that of tenants already working on lands which might be taken over from the larger owners. In view of this difficulty, it was felt that the contribution which the Bhoodan movement might make could be of special value. By the end of the first plan this movement had received in gift about 4 million acres of land and the distribution of land among landless families had also begun. A development of much significance which took place in the closing years of the plan was the initiation of the Gramdan movement under which all the owners of land in a village made a gift of their entire area for the benefit of the community as a whole. About a thousand villages were donated in this manner and the movement was making steady progress.

33. The account given in this Chapter shows that there has been considerable activity in the field of land reform in the States. Much of it has been of regional or State interest and a knowledge of local tenures is necessary for an understanding of its practical significance. The fact that land reform legislation has been complex and detailed in character and its implementation has seemed to an excessive degree to be the concern of revenue courts and revenue officials and too little the responsibility of each local community has tended

to obscure the broad principles of equity and rearrangement of economic relationships which lie behind it. The central aims of land reform programmes have been to eliminate intermediary interests, establish as far as possible direct relations between tenants and the State, obtain for tenants security of tenure and reasonable rents, and reduce disparities in the ownership of land. Once the basic conditions of peasant proprietorship are assured for the bulk of the cultivators the next step is to help improve the management of land and increase its productivity, promote greater cooperation in farm and non-farm occupations and enable each village community to assume larger obligations for the welfare and livelihood of all sections of the population, for those who hold land equally with those who, for social and historical reasons, have remained without it. These are some of the directions of policy which need to be followed through the great volume of legislation which States have undertaken in recent years. The Planning Commission has now under preparation a study which will attempt to explain the measures of land reform which have been taken in different parts of India and those still needed against the background of the land tenures and the agrarian conditions which each region or State has inherited from the past. Details of land reform programmes need to be seen always as a vital part of the process of social change and economic development which the First Five Year Plan initiated and which successive five year plans will further advance.

REVIEW OF THE FIRST FIVE YEAR PLAN

Head of Development	Progress of Expenditure							(Rs. Lakhs)	
	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1955-56 Actuals	1955-56 Revised Estimates	1951-56 (Col. 6-7)	1952 Original Plan	Plan including Adjust- ment Provision
I	2	3	4	5	6	7	8	9	10
III. Industries and Mining									
1. Village & Small Industries	144.1	183.2	710.5	1157.9	2195.7	2180.1	4375.8	2694.0	4953.3*
2. Other Industries and Mining including Scientific & Industrial Research	917.6	755.6	1126.1	2092.8	3792.1	1816.2	5608.3	14593.5	13871.0
TOTAL: III	1061.7	938.8	1836.6	2150.7	5987.8	3996.3	9984.1	17287.5	18821.3
IV. Transport & Communications									
1. Railways	4086.0	3018.0	3421.0	6621.0	17146.0	9561.0	26707.0	25000.0	26707.0
2. Roads	1543.3	1996.1	2562.2	2881.7	3983.3	4463.9	13447.2	11022.6	13514.7
3. Road Transport	114.2	264.3	264.3	344.3	987.1	248.5	1235.6	896.9	1166.3
4. Ports and Harbours	120.2	142.9	546.7	858.9	1668.7	1088.7	2757.4	3308.8	3690.6
5. Shipping	193.5	107.4	342.6	615.8	1259.3	611.7	1871.0	1805.8	2630.0
6. Other Transport	168.8	175.6	455.2	888.2	1687.8	821.8	2509.6	2297.0	3291.2
7. Posts and Telegraphs	553.0	617.0	821.0	968.0	2959.0	998.0	3957.0	5000.0	5000.0

8. Other Communications	72.6	47.4	104.7	145.5	370.2	26.1	396.3	162.0	511.0
9. Broadcasting	22.8	10.8	49.5	52.3	135.4	131.7	267.1	352.0	494.0
TOTAL: IV	6874.4	6379.5	8567.2	13375.7	35196.8	17951.4	53148.2	49845.1	57004.8
V. Social Services									
1. Education	1984.4	2242.5	2659.0	3651.0	10536.9	4759.9	15296.8	15587.3	17001.9
2. Health	1171.8	1324.6	1649.9	2287.1	6433.4	3662.1	10095.5**	10085.5	13779.1
3. Housing	284.1	337.4	476.5	719.4	1817.4	1658.4	3475.8	4867.3	4905.2
4. Labour & Labour Welfare	74.2	76.8	72.5	77.3	300.8	109.4	410.2	697.1	710.8
5. Welfare of Backward Classes	325.1	389.3	628.0	809.4	2151.8	1126.7	3278.5	2886.5	3189.7
6. Rehabilitation	2618.2	2026.3	1347.4	1568.6	7560.5	2169.0	9729.5	8500.0	13570.0
TOTAL: V	6457.8	6396.9	6833.3	9112.8	28800.8	13485.5	42286.3	42623.7	53156.6
VI. Miscellaneous	295.7	260.7	1315.7	2482.2	4354.3	3076.9	7431.2	6423.0	8602.0
GRAND TOTAL:	25959.4	26752.2	34304.4	47591.9	134607.9	66655.1	201263.0	206877.5	237767.1

*Includes schemes costing Rs. 2,000 lakhs financed from the proceeds of the Handloom Cess.

**Does not include an expenditure of Rs. 8.39 crores incurred during 1951-56 on Urban and Rural Water Supply and Sanitation schemes of U. P.

ANNEXURE I (ii)

Progress of Development Expenditure: Central Government

(Rs. lakhs)

Head of Development	Progress of Expenditure							First Five Year Plan Provision	
	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1955-56 Actuals	1955-56 Revised Estimates	1951-56 (Col. 6+7)	1952 Original	Plan including adjustments
I	2	3	4	5	6	7	8	9	10
I. Agriculture & Community Development									
(i) Agricultural Programmes									
Agriculture	187.5	380.6	1142.3	2071.4	3781.8	2934.0	6715.8	5922.2	7824.3
Animal Husbandry (including Dairying & Milk Supply)	..	10.4	12.1	26.1	48.6	53.3	101.9	412.0	312.0
Forests	..	..	2.2	22.5	24.7	276.2	300.9	200.0	100.0
Fisheries	..	0.8	4.0	6.8	11.6	26.3	37.9	50.5	100.0
Cooperation	..	..	0.5	0.5	1.0	0.2	1.2	50.0	50.0
(ii) National Extension & Community Development									
	187.5	391.8	1161.1	2127.3	3867.7	3290.0	7157.7	6634.7	8386.3
	..	137.8	592.3	1743.6	2473.7	3256.0	5729.7	9000.0	9000.0
(iii) Local Development Works (a)									
	..	..	300.0	600.0	900.0	600.0	1500.0	1500.0	1500.0
	187.5	529.6	2053.4	4470.9	7241.4	7146.0	14387.4	17134.7	18886.3

20 P.C.
II. Irrigation & Power
Multipurpose Projects

III. Industry & Mining

Large & Medium Industries	3534.7	4138.1	5116.5	5587.1	18376.4	5704.4	24080.8	26590.0	25590.0
Village and Small Industries	3534.7	4138.1	5116.5	5587.1	18376.4	5704.4	24080.8	26590.0	25590.0 (b)
Scientific & Industrial Research	577.4	442.0	673.1	674.0	2366.5	1426.0	3792.5	12604.3	11405.0(c)
Mineral Development	13.9	37.5	542.0	929.9	1523.3	1846.0	3369.3	1300.0	3750.0(d)
	84.7	97.2	74.6	41.8	298.3	97.9	395.2	461.0	619.3
	1.4	5.9	8.7	17.0	33.0	39.1	72.1	106.1	106.1
	677.4	582.6	1298.4	1662.7	4221.1	3409.0	7630.1	14671.4	15880.4

IV. Transport & Communications

Railways	4086.0	3018.0	3421.0	6621.0	17146.0	9561.0	26707.0(c)	25000.0	26707.0
Roads	383.8	414.8	581.2	651.8	2031.6	1422.7	3454.3	3124.0	4200.0
Road Transport	38.3	18.8	52.2	52.9	162.2	32.9	195.1	(f)	276.0
Ports & Harbours	102.8	129.8	525.4	828.0	1586.0	1024.9	2610.9(c)	3206.4	3505.0
Shipping	193.5	107.4	342.6	615.8	1259.3	611.7	1871.0	1805.8	2630.0
Inland Water Transport	157.0	2.0	2.0	2.0	6.0	27.5	33.5	10.0	42.0
Civil Air Transport	11.8	119.6	411.3	860.6	1578.5	740.9	2319.4	2287.0	2939.2
Other Transport (g)	21.0	41.9	25.6	103.3	53.4	156.7	(g)	310.0	

PROGRESS OF DEVELOPMENT EXPENDITURE

(Rs. lakhs)

First Five Year Plan
Provision

Progress of Expenditure

Head of Development	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Actuals	1954-55 Revised Estimates	1951-55 (Col. 6 +7)	1952 Original Plan	Plan in- cluding adjustments
I	2	3	4	5	6	7	8	9	10
Posts & Telegraphs	553.0	617.0	821.0	968.0	2959.0	998.0	3957.0	5000.0	5000.0
Overseas Communications	4.8	3.4	13.6	21.8	43.6	14.4	58.0	100.0	100.0
Other Communications(11)	67.8	44.0	91.1	123.7	326.6	11.7	338.3	62.0	411.0
Broadcasting	22.8	10.8	49.5	52.3	135.4	131.7	267.1	352.0	494.0
	5621.6	4539.6	6352.8	10823.5	27337.5	14630.8	41968.3	40947.2	46614.2
V. Social Services									
Education	240.0	300.0	320.0	990.0	1850.0	1310.0	3160.0	3901.6	4550.8
Health	12.3	16.3	239.1	532.9	800.6	582.6	1383.2	1787.4	2010.2
Housing	168.0	134.0	308.0	573.0	1183.0	1424.0	2607.0	3850.0	3850.0
Welfare of Backward Classes		2.4	161.8	166.1	330.3	293.4	623.7	700.0	700.0
Labour and Labour Welfare	46.2	48.1	43.8	38.5	176.6	60.6	237.2	397.3	409.5
Rehabilitation	2618.2	2026.3	1347.4	1568.6	7560.5	2169.0	9729.5	8500.0	13570.0
	3084.7	2527.1	2420.1	3869.1	11901.0	5839.6	17740.6	19136.3	25110.5

VI. Miscellaneous

Building programmes of the Ministry of
Works, Housing and Supply

1352.3

1102.3

1170.7

472.2

698.5

418.0

111.3

145.9

23.3

Finance Ministry Schemes	78.8	75.1	123.1	1,66.9	423.9	170.5	594.4	439.6	999.6
Loans to Corporations . . . . .	..	..	200.0	200.0	400.0	250.0	650.0	1200.0	1200.0
Loans for Natural Calamities . . . . .	..	..	450.0	900.0	1350.0	600.0	1950.0	1500.0	1500.0
Flood Control . . . . .	..	..	..	250.0	250.0	950.0	1200.0	..	1650.0
Others (i) . . . . .	..	..	10.5	31.5	42.0	79.6	121.6	650.0	167.9
	102.1	221.0	894.9	1946.4	3164.4	2522.3	5686.7	4891.9	6869.2
GRAND TOTAL	13208.0	12538.0	18136.1	28359.7	72211.8	3925.1	111493.9	123371.5(i)	138950.6

NOTES

(a) Figures shown against the head 'Local development Works' are allocations.

(b) Excludes Rs. 10 crores for 'Minor Irrigation' subsequently transferred to the Ministry of Food and Agriculture.

(c) Excludes the 1952 Plan provision of (i) (a) Chittaranjan Locomotive Works, (ii) Integral Coach Factory, (iii) Indian Telephone Industries, Project, Building Programmes relating to Nasik Printing Press, (iv) (a) New Mint, Alipore, (iv) (b) Silver Refinery, Alipore, and (iv) (c) Photogravure

Progress of expenditure for these items are shown under 'Railways', 'other Communications', 'Building Programmes of the Ministry of Works, Housing & Supply' and 'Finance Ministry Schemes' respectively.

(d) Includes schemes costing Rs. 20 crores to be financed from the Handloom Cess Fund.

(e) Actuals for the year 1955-56 relating to the Plan of 'Railways' and 'Ports and Harbours' have been recently received, reducing the total Plan expenditure against these heads to Rs. 258.51 crores and Rs. 25 crores respectively.

(f) The 1952 Plan provision of Rs. 216 lakhs for Delhi Transport Service is shown under the Plan of Delhi.

(g) 'Other Transport' includes: (i) Schemes relating to Light Houses, (ii) Training Schemes and (iii) Schemes relating to Rest Houses (Tourism, under the Ministry of Transport). The 1952 Plan provision for the same is accounted under the sub-head 'others' of the main head 'Miscellaneous'.

(h) Progress of expenditure under the heads 'Other Communications' relates to Indian Telephone Industries and Meteorological Department.

(i) Progress of expenditure under the head 'Others' relates to Integrated Publicity Programme under the Ministry of Information and Broadcasting. The 1952 Plan provision, however, was meant to be a lump sum provision for all miscellaneous items.

(j) Excludes Rs. 682.8 lakhs relating to Development Programme for Andamans (under the Ministry of Home Affairs) and for N. E. F. A. (under Ministry of External Affairs) now shown under the States.

ANNEXURE I (iii)

Progress of Development Expenditure: States

States	(Rs. lakhs)									
	1951-52 (Actuals)	1952-53 (Actuals)	1953-54 (Actuals)	1954-55 (Actuals)	1951-55 (Actuals)	1955-56 (Revised) Estimates	1951-56 (col. 6+7)	1952 (Original) Plan Provision	Plan including 'Adjust- ments', Scarcity Area Pro- gramme, Power expansion facilities for in- creasing employ- ment op- portunities, National Water Supply & Sanitation Programme etc.	
I										
Andhra	1057.8	1001.7	1090.8	1527.0	4677.3	1743.3	6420.6	*	6713.5	
Assam	133.6	201.4	310.6	500.8	1146.4	959.3	2105.7	1749.2	2167.3	

Bihar	.	.	.	978.4	910.9	1456.9	4688.0	2638.3	7326.3	5729.1	6867.0
Bombay	.	.	.	2844.2	3228.8	3348.3	11672.1	3947.0	15619.1	14643.3	19885.7
Madhya Pradesh	.	.	.	493.2	738.5	1004.4	2885.7	1370.4	4256.1	4308.2	4817.9
Madras	.	.	.	1527.6	1342.1	1420.5	5747.7	2815.4	8563.1	14084.1	9020.5
Orissa	.	.	.	272.0	299.5	405.0	1219.7	611.7	1831.4	1784.2	2123.3
Punjab	.	.	.	243.2	728.1	855.8	2173.6	1005.8	3179.4	2020.7	3444.9
Uttar Pradesh	.	.	.	1939.0	2175.6	2418.4	8072.2	2473.0	10545.2**	9782.3	12983.6
W. Bengal	.	.	.	1210.4	1592.3	1449.0	5267.5	2187.6	7455.1	6909.7	7645.4
TOTAL:	.	.	.	10789.6	12417.2	14386.1	47550.2	19751.8	67302.0	61010.8	71769.1
Hyderabad	.	.	.	648.7	650.8	691.8	2637.3	811.2	3448.5	4155.0	4700.5
Madhya Bharat	.	.	.	275.9	270.9	434.9	1172.3	947.3	2119.6	2242.0	2262.2
Mysore	.	.	.	826.2	782.7	904.6	3231.1	1082.3	4313.4	3660.2	4967.6
Pepsu	.	.	.	94.0	172.5	242.3	567.3	426.3	993.6	814.6	1016.8
Rajasthan	.	.	.	223.7	336.7	496.1	1257.8	776.3	2034.1	1681.4	2546.6
Saurashtra	.	.	.	403.4	309.4	523.9	1531.1	1055.4	2586.5	2040.9	2724.1
Travancore Cochin	.	.	.	471.2	500.2	480.8	1851.1	760.3	2611.4	2731.9	3128.4
Jammu & Kashmir	.	.	.	118.4	157.2	306.2	673.0	436.7	1109.2	1300.0	1274.2
TOTAL	.	.	.	3061.5	3180.4	4080.6	12921.0	6295.8	19216.3	18626.0	22620.4
Ajmer	.	.	.	11.6	16.5	38.8	76.9	80.9	157.8	157.2	182.2
Bhopal	.	.	.	52.4	100.3	121.9	309.3	172.0	481.3	389.9	552.6
Coorg	.	.	.	11.5	17.9	17.1	58.8	40.0	98.8	73.0	124.3
Delhi	.	.	.	78.6	89.7	126.8	351.5	233.5	585.0	748.0	678.8
Himachal Pradesh	.	.	.	49.0	114.2	105.4	280.7	217.9	498.6	511.7	569.9
Kutch	.	.	.	57.9	39.7	45.6	159.7	75.3	235.0	305.3	325.3
Manipur	.	.	.	14.2	22.6	24.4	61.2	47.0	108.2	154.8	154.8
Tripura	.	.	.	15.6	25.7	43.0	88.5	78.3	161.8	207.3	226.8
Vindhya Pradesh	.	.	.	44.7	70.7	158.2	300.8	259.7	560.5	639.2	735.0
TOTAL	.	.	.	335.5	497.3	681.2	1687.4	1199.6	2887.0	3186.4	3549.7

* Included in the Plan of composite Madras shown against the State of Madras.

** Does not include an expenditure of Rs. 8.39 crores incurred during 1951-56 on Urban and Rural Water: Supply and Sanitation schemes.

		(Rs. Lakhs.)										Remarks
		1	2	3	4	5	6	7	8	9	10	11
		1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 Total (Col. 6 + col. 7)	1952 Plan Provision	First Plan including adjustments		
9.	Uttar Pradesh	347.1	270.7	212.9	393.6	1224.3	386.8	1611.1	2095.9	1652.5		
10	West Bengal	134.5	131.1	104.6	94.4	464.6	132.2	596.8	688.1	583.9		
Total : Part 'A' States		1667.7	1382.6	1451.8	1706.7	6208.8	2374.6	8583.4	9108.2	8,88.0		
11.	Hyderabad	56.4	29.5	24.5	35.0	145.4	75.7	221.1	346.4	346.4		
12.	Madhya Bharat	46.2	75.5	46.2	105.3	273.2	216.6	489.8	750.0	474.5		
13.	Mysore	119.4	85.6	80.8	60.4	346.2	52.3	398.5	443.0	461.1		
14.	Pepsu	36.0	35.2	66.1	45.0	182.3	141.4	323.7	335.2	294.8		
15.	Rajasthan	9.5	26.0	36.2	43.4	115.1	57.8	172.9	109.2	215.0		
16.	Saurashtra	104.3	79.4	40.7	48.3	272.7	75.9	348.6	212.4	212.4		
17.	Travancore-Cochin	39.0	38.6	15.0	53.6	146.2	92.2	238.4	545.1	545.1		
TOTAL : Part 'B' States		410.8	369.8	309.5	391.0	1481.1	711.9	2193.0	2741.3	2549.3		
18.	Jammu & Kashmir	..	..	..	8.8	8.8	6.1	14.9	41.8	20.2		
19.	Ajmer	5.2	4.5	3.7	16.4	29.8	16.1	45.9	48.4	48.4		
20.	Bhopal	28.8	27.4	35.5	29.6	121.3	38.4	159.7	173.0	173.0		

PROGRESS OF DEVELOPMENT EXPENDITURE

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21. Coorg	6.4	7.0	7.3	3.8	24.5	5.9	30.4	..	26.0
22. Delhi	13.6	15.2	12.5	10.4	51.7	10.7	62.4	63.6	86.5
23. Himachal Pradesh	0.8	2.3	2.4	5.8	11.3	17.1	23.7	35.0	31.5
24. Kutch	8.5	7.7	3.9	6.2	26.3	5.6	31.9	60.6	45.7
25. Manipur	..	..	..	0.4	0.4	0.5	0.9	0.8	0.8
26. Tripura	10.5	19.2	26.9	51.2	107.8	3.3	4.6	12.6	8.6
27. Vindhya Pradesh	73.8	83.3	92.5	124.8	371.4	194.5	563.9	224.7	201.7
TOTAL : Part 'C' States	2152.3	1835.7	1853.8	2231.3	8073.1	3287.1	11360.2	12490.0	11685.7
TOTAL : Part 'A', Part 'B' and Part 'C' States	..	..	..	..	..	..	..	..	..
(including Jammu & Kashmir)	..	..	..	0.8	0.8	1.1	1.9	..	2.2
Andaman & Nicobar Islands	..	..	..	8.8	25.6	11.7	37.3	30.0	37.2
Pondicherry	2.9	6.2	7.7	9.6	26.4	12.8	39.2	30.0	39.4
NIEFA	2.9	6.2	7.7	9.6	26.4	12.8	39.2	30.0	39.4
TOTAL : Other Territories	2155.2	1841.9	1861.5	2240.9	8099.5	3299.9	11399.4	12520.0	11725.1
TOTAL : States	2342.7	2222.5	3003.8	4312.3	11881.3	6233.9	18115.2	18442.2	19549.4
GRAND TOTAL : Centre and States	..	..	..	..	..	..	..	..	..

*including Animal Husbandry.

Progress of Development Expenditure

2. ANIMAL HUSBANDRY

		(Rs. lakhs)									
I	Centre	1951-52	1952-53	1953-54	1954-55	1951-55	1955-56	1951-56	1952 Plan	First	Remitts
		Actuals	Actuals	Actuals	Actuals	Total	Revised Estimates	Total (Col. 6 + Col. 7)	Provision	Plan including adjustments	
1		2	3	4	5	6	7	8	9	10	11
I.	Centre	.	.	.	.	.	.	.	.	.	.
II.	States:	.	.	.	.	.	.	.	.	.	.
1.	Andhra	.	8.9	6.3	7.6	30.3	9.5	39.8	..	47.5	
2.	Assam	.	1.5	1.9	3.9	8.5	12.5	21.0	12.5	11.8	
3.	Bihar	.	12.8	12.8	21.9	59.1	40.1	99.2	92.5	123.4	
4.	Bombay	.	25.1	15.8	22.1	83.0	31.7	114.7	156.9	166.9	
5.	Madhya Pradesh	.	14.8	13.3	19.0	62.6	26.1	88.7	98.8	91.5	
6.	Madras	.	61.3	7.0	7.7	29.4	14.0	43.4	100.0	56.2	
7.	Orissa	.	4.3	6.7	5.7	21.8	15.1	36.9	52.8	36.9	
8.	Punjab	.	3.4	3.5	4.4	15.2	4.9	20.1	22.0	20.7	

REVIEW OF THE FIRST FIVE YEAR PLAN

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9.	Uttar Pradesh	12.0	15.3	24.5	21.7	73.5	26.1	99.6	131.1	137.5
10.	West Bengal	15.5	13.8	22.0	20.9	72.2	20.4	92.6	74.7	95.9
	TOTAL : Part 'A' States	104.6	93.6	122.5	134.9	455.6	200.4	656.0	751.3	790.3
11.	Hyderabad	0.3	0.9	1.4	3.0	5.6	3.1	8.7	49.6	49.6
12.	Madhya Bharat	1.4	2.8	3.2	7.0	14.4	21.9	36.3	50.0	55.9
13.	Mysore	11.4	11.2	11.1	9.7	43.4	9.2	52.6	55.8	63.4
14.	Pepsu	..	0.2	1.3	3.9	5.4	5.6	11.0	10.0	11.3
15.	Rajasthan	..	..	..	4.0	4.0	11.7	15.7	18.3	28.3
16.	Saurashtra	..	..	1.7	2.3	5.6	3.9	9.5	10.4	10.4
17.	Travancore-Cochin	0.5	1.1	1.7	0.2	0.2	1.9	2.1	2.5	2.5
	TOTAL : Part 'B' States	13.6	16.2	18.7	30.1	78.6	57.3	135.9	194.6	221.4
	TOTAL : Jammu and Kashmir	..	..	0.3	9.6	9.9	9.8	19.7	15.0	21.4
18.	Almer	0.1	0.1	0.3	0.5	1.0	3.2	4.2	9.6	9.6
19.	Bhopal	0.3	0.6	0.4	1.4	2.7	4.7	7.1	7.0	7.0
20.	Coorg	..	0.2	..	..	0.2	..	0.2	..	1.1
21.	Delhi	1.0	1.1	1.6	2.1	5.8	2.2	8.0	9.4	9.4
22.	Himachal Pradesh	0.1	0.7	1.2	1.5	3.5	4.2	7.7	23.5	4.3
23.	Kutch	0.5	0.4	0.8	0.8	2.5	1.5	4.0	3.9	4.3
24.	Kutch	..	0.1	0.2	0.3	0.6	0.8	1.4	2.5	2.5

REVIEW OF THE FIRST FIVE YEAR PLAN

	(Rs. Lakhs)										
	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 Total (Col 6 + Col.7)	1952 Plan Provision	First Plan including adjustments	Remarks	
I	2	3	4	5	6	7	8	9	10	11	
26. Tripura . . . . .	..	0.1	0.3	0.6	1.0	1.3	2.3	2.8	3.9		
27. Vindhya Pradesh.	0.4	0.1	1.4	2.8	4.7	4.6	9.3	12.9	12.9		
TOTAL : Part 'C' States	2.4	3.4	6.2	10.0	22.0	22.5	44.5	71.6	60.5		
TOTAL Part 'A', Part 'B' & Part 'C' States : (including Jammu and Kash- mir)	120.6	113.2	147.7	181.6	566.1	290.0	856.1	1035.5	1096.6		
Anjman and Nicobar Islands . . . . .	..	..	..	..	..	..	..	..	..
Pondicherry . . . . .	..	..	..	0.1	0.1	2.5	2.6	..	2.3		
N.E.F.A. . . . .	..	..	..	..	..	..	..	2.0	..		
TOTAL : Other Territories . . . . .	..	..	..	0.1	0.1	2.5	2.6	2.0	2.3		
TOTAL : States	120.6	113.2	147.7	181.7	566.2	292.5	858.7	1037.5	1098.9		
GRAND TOTAL : Centre and States	120.6	123.6	159.8	210.8	614.8	315.8	960.6	1449.5	1710.9		

[illegible]

21. Coorg	.	.	..	0.2	0.1	0.3	1.4	1.7	1.0	1.0
22. Delhi	.	.	..	..	0.1	0.1	0.1	0.2	1.0	1.9
23. Himachal Pradesh	.	.	..	..	.	..	..	..	..	.
24. Kutch	.	.	..	..	..	..	..	..	..	..
25. Manipur	.	.	..	..	..	..	..	..	..	..
26. Tripura	.	.	..	..	..	..	..	..	..	..
27. Vindhya Pradesh	.	.	..	..	0.1	0.4	0.8	1.2	1.5	1.5
TOTAL.—Part 'C' States	.	..	..	0.2	0.6	0.8	2.3	3.1	7.4	7.4
TOTAL : Part 'A', Part 'B' & Part 'C' States (including Jammu and Kashmir)	.	.	125.6	143.8	92.3	117.3	479.0	155.1	631.4	781.0
Andamans and Nicobar Islands	.	.	..	..	..	..	..	..	..	..
Pondicherry	.	.	..	..	..	..	..	..	..	..
N. E. F. A.	.	.	..	..	..	..	..	..	..	..
TOTAL: Other Territories	.	..	..	..	..	..	..	..	..	..
TOTAL: States	.	125.6	143.8	92.3	117.3	479.0	155.1	631.4	781.0	778.3
GRAND TOTAL: Centre and States:	.	125.6	143.8	92.3	117.3	479.0	155.1	631.4	781.0	778.3

* Included under Animal Husbandry.

Progress of Development Expenditure

4. FORESTS

(Rs. lakhs)

		1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 (Col. 6 + Col. 7)	1952 Plan Provision	First Plan including adjust- ments	Remarks
I		2	3	4	5	6	7	8	9	10	11
I. Centre	.	.	.	3.2	22.5	24.7	276.2	300.9	300.0	100.0	
II. States :											
1. Andhra	.	4.4	1.4	1.1	5.1	12.0	7.6	19.6	..	14.5	
2. Assam	.	6.5	7.0	7.1	13.5	34.1	17.6	51.7	36.3	47.4	
3. Bihar	.	22.3	15.0	19.8	26.5	83.6	40.6	124.2	125.0	125.0	
4. Bombay	.	8.3	12.2	14.4	21.8	56.7	29.6	86.3	83.8	83.8	
5. Madhya Pradesh	.	7.9	7.2	7.1	7.5	29.7	9.8	39.5	40.8	39.7	
6. Madras	.	3.4	4.3	3.7	7.3	18.7	10.4	29.1	38.8	74.3	
7. Orissa	.	1.1	1.4	1.8	4.5	8.8	8.6	17.4	13.1	17.2	
8. Punjab	.	11.4	11.4	11.3	11.1	45.2	12.3	57.5	18.0	60.4	
9. Uttar Pradesh	.	12.6	22.2	29.8	38.3	102.9	35.9	138.8	165.2	141.8	

10.	West Bengal	7.6	8.9	6.8	12.2	35.5	44.6	80.1	78.8	63.7
TOTAL : Part 'A' States		85.5	91.0	102.9	147.8	427.2	217.0	644.2	599.8	667.8
11.	Hyderabad	2.8	0.1	2.4	4.4	9.7	4.5	14.2	21.4	21.4
12.	Madhya Bharat	0.4	4.5	4.4	15.2	24.5	19.3	43.8	50.0	48.0
13.	Mysore	1.4	1.5	1.1	1.4	5.4	2.0	7.4	8.3	8.4
14.	Pepsu	0.5	3.9	7.8	12.4	24.6	16.4	41.0	43.6	43.4
15.	Rajasthan	..	..	2.2	3.2	5.4	12.5	17.9	21.8	21.0
16.	Saurashtra	0.8	2.7	3.1	5.0	11.6	4.7	16.3	19.5	19.5
17.	Travancore-Cochin	..	..	..	..	..	4.6	4.6	60.0	..
TOTAL : Part 'B' States		5.9	12.7	21.0	41.6	81.2	64.0	145.2	224.6	161.7
18.	Jammu & Kashmir	0.5	0.5	0.9	4.8	6.7	6.9	13.6	10.0	16.8
19.	Ajmer	0.9	1.3	1.3	1.4	4.9	2.2	7.1	10.6	10.6
20.	Bhopal	..	1.2	5.3	4.4	10.9	7.6	18.5	20.0	20.0
21.	Coorg	..	..	0.8	0.7	1.5	1.7	3.2	..	1.0
22.	Delhi	0.1	0.1	0.3	..	0.5	..	0.5	2.2	2.7
23.	Himachal Pradesh.	0.6	0.3	1.0	3.1	5.0	6.8	11.8	64.0	17.8
24.	Kutch	..	0.2	0.1	0.3	0.6	0.2	0.8	1.4	1.4
25.	Manipur	..	0.2	0.6	0.8	1.6	1.1	2.7	3.0	3.0

REVIEW OF THE FIRST FIVE YEAR PLAN

		(Rs. Lakhs)										Remarks
		1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1955-56 Total	1955-56 Revised Estimates	1956-57 Total (Col. 6 + Col. 7)	1957-58 Provision	1958-59 Plan including adjustments	1959-60 Plan	
I		2	3	4	5	6	7	8	9	10	11	
26.	Tripura	0.2	0.8	1.3	1.9	4.2	3.0	7.2	11.3	10.8		
27.	Vindhya Pradesh	..	3.1	4.2	4.5	11.8	7.8	19.6	22.5	22.5		
TOTAL : Part 'C' States		1.8	7.2	14.9	17.1	41.0	30.4	71.4	135.0	89.8		
TOTAL : Part 'A', Part 'B' & Part 'C' States (including Jammu & Kashmir)		93.7	111.4	139.7	211.3	556.1	318.3	874.4	969.4	936.1		
Andaman and Nicobar Islands		..	..	..	..	..	..	..	..	..
Pondicherry		..	..	..	..	..	..	..	..	..
N. E. F. A.		2.4	3.5	4.9	5.4	16.2	7.3	23.5	20.9	26.2		
TOTAL : Other Territories		2.4	3.5	4.9	5.4	16.2	7.3	23.5	20.0	26.2		
TOTAL : States.		96.1	114.9	144.6	216.7	572.3	325.6	897.9	989.4	962.3		
GRAND TOTAL : Centre and States		96.1	114.9	146.8	239.2	597.0	601.8	1198.8	1189.4	1062.3		

Progress of Development Expenditure
5. COOPERATION

(Rs. Lakhs)												Remarks	
		1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates + col.7)	1951-56 (Col. 6 + col.7)	1952 Plan Provision	1953 Plan including adjust- ments	10	11	
I		2	3	4	5	6	7	8	9				
I. Centre		..	..	0.5	0.5	1.0	0.2	1.2	50.0	50.0			
II. States :													
1. Andhra.		3.5	3.3	1.5	5.1	13.4	4.7	18.1	..	25.8			
2. Assam .		..	..	0.2	4.1	4.3	13.8	18.1	29.3	15.3			
3. Bihar .		5.4	6.7	7.0	8.0	27.1	12.4	39.5	39.0	39.0			
4. Bombay .		20.2	20.2	22.4	11.5	74.3	17.8	92.1	123.2	123.2			
5. Madhya Pradesh .		2.4	1.9	3.1	4.6	12.0	7.6	19.6	28.8	28.8			
6. Madras.		2.5	2.7	1.3	2.2	8.7	2.2	10.9	100.0	17.1			
7. Orissa .		0.8	0.6	0.6	0.8	2.8	14.8	17.6	28.9	5.1			
8. Punjab		3.2	3.4	13.8	6.7	27.1	1.7	28.8	11.8	33.8			
9. Uttar Pradesh .		25.5	25.7	24.6	25.4	101.2	29.4	130.6	130.7	130.7			
10. West Bengal		..	..	..	..	..	..	..	..	..
TOTAL : Part 'A' States		63.5	64.5	74.5	68.4	270.9	104.4	375.3	491.7	418.8			

REVIEW OF THE FIRST FIVE YEAR PLAN

[illegible]

27	Vindhya Pradesh . . . . .	..	..	1.0	1.0	2.0	1.6	3.6	3.0	3.0
	TOTAL : Part 'C' States	0.2	0.9	5.2	13.0	19.3	26.9	46.2	44.3	55.7
	TOTAL : Part 'A' , Part 'B' & Part 'C' States (including Jammu & Kashmir)	76.9	70.5	92.0	97.7	337.1	175.4	512.5	661.2	602.8
	Andamans and Nicobar Islands . . . . .	..	..	..	..	..	..	..	..	..
	Pondicherry . . . . .	..	..	..	..	..	1.7	1.7	..	2.9
	M.E.F.A.. . . . .	..	..	..	..	..	..	..	..	..
	TOTAL : Other Territories . . . . .	..	..	..	..	..	1.7	1.7	..	2.9
	TOTAL : States'	76.9	70.5	92.0	97.7	337.1	177.1	514.2	661.2	605.7
	GRAND TOTAL : Centre And States	76.9	70.5	92.5	98.2	338.1	177.3	515.4	711.2	655.7

6. FISHERIES

(Rs. Lakhs)

6. Results											Remarks
	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 (Col. 6 + col. 7)	1952 Plan Provision	First Plan in- cluding adjust- ments	10	11
I	2	3	4	5	6	7	8	9			
I. Centre	..	0.8	4.0	6.8	11.6	26.3	37.9	50.5	100.0		
II. States:											
1. Andhra.	1.4	1.4	1.0	0.8	4.6	1.2	5.8	..	5.9		
2. Assam	0.8	1.0	1.9	2.5	6.2	5.5	11.7	6.0	10.5		
3. Bihar	1.4	1.3	1.4	1.5	5.6	1.7	7.3	10.6	8.6		
4. Bombay	2.1	2.0	2.8	3.0	9.9	5.2	15.1	16.0	16.0		
5. Madhya Pradesh	0.8	0.9	6.2	4.9	3.8	1.6	5.4	100.0	49.0		
6. Madras.	13.2	6.3	4.7	4.7	21.2	4.8	35.4	33.4	30.2		
7. Orissa	7.4	4.7	4.4	0.1	0.1	0.1	0.2	..	0.4		
8. Punjab	..	..	..	0.5	2.5	0.8	3.3	6.2	6.2		
9. Uttar Pradesh	0.1	0.8	1.1	8.6	19.4	15.4	6.1	15.4	72.9		
10. West Bengal	13.3	31.6	29.1	27.7	129.3	46.5	175.7	332.5	205.9		
TOTAL: Part 'A' States	10.5	10.5	31.6	29.1	27.7	129.3	46.5	175.7	332.5	205.9	

11. Hyderabad . . .	0.8	0.7	0.9	0.9	3.3	1.5	4.8	8.6	8.6
12. Madhya Bharat . .	0.4	0.7	1.1	2.4	4.6	2.4	7.0	10.0	7.5
13. Mysore.	0.4	0.5	0.6	0.6	2.1	1.0	3.1	2.2	2.6
14. Pepsu . . . . .	..	0.2	0.2	0.6	1.0	1.1	2.1	2.4	2.0
15. Rajasthan . . . .	..	..	..	0.2	0.2	0.2	0.4	..	..
16. Saurashtra	0.8	0.5	1.3	11.2	13.8	19.4	33.2	34.7	34.7
17. Travancore-Cochin .	..	..	..	0.3	0.3	1.2	1.5	15.0	15.0
TOTAL: Part 'B' States .	2.4	2.6	4.1	16.2	25.3	26.8	52.1	72.9	70.4
18. Jammu & Kashmir . .	..	..	..	..	..	..	..	..	..
19. Ajmer . . . . .	..	..	..	..	..	..	..	..	..
20. Bhopal	0.3	0.3	0.4	0.4	1.3	0.8	2.1	2.0	2.0
21. Coorg . . . . .	..	..	..	..	..	..	..	..	..
22. Delhi	0.4	0.3	0.4	0.4	1.5	0.6	2.1	2.6	2.4
23. Himachal Pradesh . .	0.2	..	0.1	0.1	0.4	0.6	1.0	1.5	1.5

I	2	3	4	5	6	7	8	9	10	11	(Rs lakhs)	First Plan including adjustments	Remarks
24. Kutch	..	0.1	0.1	0.8	1.0	2.9	3.9	1.4	1.4	..	..	..	..
25. Manipur	..	..	..	..	..	..	..	..	..	..	..	..	..
26. Tripura	..	..	..	0.5	0.5	0.5	1.0	..	1.4	..	..	..	..
27. Vindhya Pradesh	..	0.1	0.2	0.7	1.0	0.8	1.8	1.2	1.2	..	..	..	..
TOTAL : Part 'C' States	0.8	0.8	1.2	2.9	5.7	6.2	11.9	8.2	9.9	..	..	..	..
TOTAL : Part 'A' Part 'B' and Part 'C' States (including Jammu and Kashmir)	43.7	35.0	34.7	46.8	160.2	79.5	239.7	414.1	286.2	..	..	..	..
Andaman and Nicobar Islands	..	..	..	..	..	..	..	..	..	..	..	..	..
Pondicherry	..	..	..	..	..	0.3	0.3	..	2.3	..	..	..	..
N.E.F.A.	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTAL 1 Other Territories	..	..	..	..	..	0.3	0.3	..	2.3	..	..	..	..
TOTAL : States	43.7	35.0	34.7	46.8	160.2	79.8	240.0	414.1	288.5	..	..	..	..
GRAND TOTAL : Centre and States	43.7	35.8	38.7	53.6	171.8	106.1	277.9	464.6	388.5	..	..	..	..

Progress of Development Expenditure
7. COMMUNITY DEVELOPMENT AND NATIONAL EXTENSION SERVICE (INCLUSIVE OF RURAL DEVELOPMENT PROGRAMMES OF STATES)

(Rs. lakhs)

	1	2	3	4	5	6	7	8	9	10	11
		1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 (Col. 6 + Col. 7)	1952 Plan Provision	First Plan including adjustments	Remarks
I. Centre
II. States:											
1. Andhra.	.	16.9	11.0	16.3	..	44.2	..	44.2	..	46.1	
2. Assam.	.	14.9	20.7	21.0	17.5	74.1	28.6	102.7	39.3	98.0	
3. Bihar	.	12.6	17.3	21.7	27.7	79.3	43.8	123.1	124.7	124.7	
4. Bombay	.	15.8	14.3	13.4	14.8	58.3	17.8	76.1	131.5	131.5	
5. Madhya Pradesh	.	7.4	8.2	6.8	17.9	40.3	49.5	89.8	165.9	124.3	
6. Madras.	.	11.5	13.6	..6.5	2.4	34.0	3.4	37.4	200.0	30.0	
7. Orissa	10.0	..	
8. Punjab	.	..	8.0	22.8	17.4	48.2	14.4	62.6	..	71.4	
9. Uttar Pradesh	
10. West Bengal	.	..	0.2	1.9	5.3	7.4	1.1	8.5	3.0	9.1	
TOTAL : Part 'A' States	.	79.1	93.3	110.4	103.0	385.8	155.6	544.4	674.4	635.1	

TOTAL: Part 'C' States										4.2
TOTAL: Part 'A', 'B' & 'C' States (Including Jammu & Kashmir)										1087.8
28. Andamans and Nicobar Islands	..	..	148.4	174.1	204.1	653.8	330.7	984.5	1046.6
29. Pondicherry	..	..	..	..	..	..	..	..	..
30 N.E.F.A.	..	..	..	..	..	..	..	..	..
TOTAL: Other Territories	..	..	..	..	..	..	..	..	..
TOTAL: States	127.2	148.4	174.1	204.1	653.8	330.7	984.5	1046.6	1087.8	
GRAND TOTAL: Centre & States	127.2	286.2	766.4	194.7	3127.5	3586.7	6714.2	10046.6	10087.8	

Progress of Development Expenditure
8. LOCAL DEVELOPMENT WORKS

	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 Total (Col 6 + col. 7)	1952 Plan Provision	First Plan in- cluding adjust- ments	Remarks
I										
Centre										
			300.0	600.0	900.0	600.0	8	9	10	II
						1500.0	1500.0	1500.0	1500.0	

Progress of Development Expenditure

9. IRRIGATION PROJECTS

(Rs. lakhs)

	1	2	3	4	5	6	7	8	9	10	11
		1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 Total (Col. 6 + Col. 7)	1952 Plan Provision	First Plan in- cluding adjust- ments	Remarks
I. Centre (Multi-purpose Pro- jects)		3534.7	4138.1	5116.5	5537.1	18376.4	5701.4	24080.8	26590.0	21590.0*	
II. States:											
1. Andhra		211.2	243.0	197.4	328.5	980.1	491.4	1471.5	..	1744.3	
2. Assam		0.9	7.7	24.2	95.3	128.1	223.4	351.5	200.0	337.2	
3. Bihar		173.4	153.9	77.0	290.9	695.2	556.8	1252.0	973.3	1215.4	
4. Bombay		268.6	255.6	522.3	598.7	1645.2	780.2	2425.4	2269.0	2856.3	
5. Madhya Pradesh		10.2	2.5	42.7	93.9	149.3	112.9	262.2	308.0	334.5	
6. Madras		411.0	416.0	290.0	377.9	1494.9	565.3	2060.2	3408.0	2018.5	

*Excludes Rs. 10 crores for Minor Irrigation transferred to the Ministry of Food and Agriculture.

REVIEW OF THE FIRST FIVE YEAR PLAN

1	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1955-56 Total	1955-56 Revised Estimates	1955-56 Total (col. 6 + col. 7)	1952 Plan Provision	First Plan including adjustments	Remarks
	2	3	4	5	6	7	8	9	10	11
7. Orissa		69.5								
8. Punjab		77.0								
9. Uttar Pradesh		246.5								
10. West Bengal		190.1								
TOTAL: Part 'A' States		1658.4								
11. Hyderabad		393.9								
12. Madhya Bharat]		32.1								
13. Mysore.		248.4								
14. Pepsu		3.8								

PROGRESS OF DEVELOPMENT EXPENDITURE

15. Rajasthan	56.1	51.3	74.7	136.8	318.9	276.0	594.9	503.6	693.3
16. Saurashtra	70.2	141.7	108.8	156.6	477.3	186.6	663.9	474.7	779.6
17. Travancore-Cochin	81.3	91.7	88.0	115.7	376.7	134.8	511.5	478.0	578.0
TOTAL: Part 'B' States	885.8	1049.3	964.5	1392.3	4291.9	1756.4	6048.3	5013.2	6678.0
18. Jammu & Kashmir	22.3	23.9	19.7	67.2	133.1	85.1	218.2	339.9	268.7
19. Ajmer	..	..	1.4	3.5	4.9	11.6	16.5	11.3	36.3
20. Bhopal	0.1	0.1	3.3	3.4	..	9.7
21. Coorg
22. Delhi	5.0	5.0	..	17.0

PROGRESS OF DEVELOPMENT EXPENDITURE

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Progress of Development Expenditure
10. POWER PROJECTS

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REVIEW OF THE FIRST FIVE YEAR PLAN

THE FIRST FIVE YEAR PLAN											
(Rs. lakhs)											Remarks
1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates Col. 7)	1951-56 Plan Provision	1952 Plan including adjust- ments	10	11		
I	2	3	4	5	6	7	8	9			
I. Centre											
II. States:											
I. Andhra.											
2. Assam .		365.0	332.0	478.0	726.0	1901.0	676.0	2577.0	..	2531.9	
3. Bihar .		..	0.3	8.4	31.9	40.6	96.1	136.7	83.0	199.6	
4. Bombay .		80.0	150.5	142.9	165.1	538.5	410.4	948.9	708.7	979.6	
5. Madhya Pradesh .		253.0	288.9	223.0	118.0	882.9	215.0	1097.9	1043.0	1348.1	
6. Madras .		148.3	82.4	126.2	120.0	476.9*	317.3*	794.2*	600.0	854.7	
7. Orissa .		432.0	453.0	452.0	584.1	1921.1	1146.7	3067.8	5024.0	3386.0	
8. Punjab .		58.6	58.6	70.9	120.2	308.3	166.4	474.7	391.0	614.6	
9. Uttar Pradesh .		43.3	51.8	139.0	163.9	398.0	226.1	624.1	38.2	561.9	
		225.5	325.8	458.6	387.4	1397.3	292.4	1689.7	1411.0	2341.8	

10. West Bengal

TOTAL : Part 'A' States	25.0	27.7	24.0	22.5	99.2	157.4	256.6	75.8	259.3
11. Hyderabad	1630.7	1771.0	2123.0	2439.1	7963.8	3703.8	11667.6	9374.7	13077.5
12. Madhya Bharat	55.6	57.6	59.0	65.4	237.6	84.5	322.1	320.6	368.1
13. Mysore	45.7	57.5	39.8	44.1	187.1	79.4	266.5	228.0	287.7
14. Pepsu	198.7	283.9	250.2	138.3	871.1	175.6	1046.7	1268.0	1571.7
15. Rajasthan	4.5	..	..	..	4.5	11.7	16.2	30.6	30.6
16. Saurashtra	39.6	18.5	30.7	7.2	96.0	23.9	119.9	40.8	367.1
17. Travancore-Cochin	14.2	27.0	29.3	36.5	107.0	245.0	352.0	212.5	363.2
TOTAL : Part 'B' States	206.2	217.2	262.2	154.9	840.5	221.7	1062.2	1035.0	1185.0
18. Jammu and Kashmir	564.5	661.7	671.2	446.4	2343.8	841.8	3185.6	3135.5	4173.4
19. Ajmer	36.1	48.0	45.8	60.1	190.0	81.2	271.2	74.9	295.1
20. Bhopal	..	..	..	..	..	0.1	0.1	..	..
21. Coorg	1.9	4.8	3.0	3.2	12.9	7.6	20.5	27.9	73.9
22. Delhi	..	..	..	..	..	7.4	7.4	35.0	42.4
23. Himachal Pradesh	..	..	..	..	..	..	..	..	..
24. Kutch	..	..	..	..	..	..	..	..	..
25. Manipur	1.5	2.9	2.4	6.8	15.3	22.1	13.5	35.4	35.4
26. Tripura	7.1	0.7	1.9	9.7	22.1	31.8	23.0	60.5	60.5
27. Vindhya Pradesh	0.6	0.1	0.7	1.4	8.3	9.7	12.0	12.0	12.0
TOTAL : Part 'C' States	0.3	3.7	4.5	8.5	6.6	15.1	7.0	7.0	7.0
TOTAL	0.2	0.3	8.3	8.8	37.7	46.5	50.5	72.5	72.5
*Excluding Rural Electrification Schemes.	1.9	10.7	21.0	48.1	105.1	153.2	168.9	303.7	303.7

	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 Total (Col. 6 + Col. 7)	1952 plan Provision	First Plan including adjustments	Remarks
I	2	3	4	5	6	7	8	9	10	11
TOTAL : Part 'A', Part 'B' and Part 'C' States (Including Jammu & Kashmir)	2233.2	2495.2	2850.7	2966.6	10545.7	4731.9	15277.6	12754.0	17849.7	
Andaman & Nicobar Islands	..	..	..	..	..	..	..	..	..
Pondicherry	..	..	..	1.7	1.7	10.1	11.8	..	13.0	
N.E.F.A.	..	..	..	..	..	..	..	..	..
TOTAL : Other Territories	..	..	..	1.7	1.7	10.1	11.8	..	13.0	
TOTAL : States	2233.2	2495.2	2850.7	2968.3	10547.4	4742.0	15289.4	12754.0	17862.7	
GRAND TOTAL : Centre and States	2233.2	2495.2	2850.7	2968.3	10547.4	4742.0	15289.4	12754.0	17862.7	

Progress of Development Expenditure
II. VILLAGE AND SMALL INDUSTRIES

PROGRESS OF DEVELOPMENT EXPENDITURE												
		(Rs. Lakhs)										
		Actuals		1951-55 Total		1955-56 Revised Estimates (Col. 6 + Col. 7)		1952 Plan Provision		First Plan including adjustments		
		1	2	3	4	5	6	7	8	9	10	11
I Centre:												
II. States :												
1. Andhra		.	13.9	37.5	542.0	929.9	1523.3	1846.0	3369.3	1500.0	3750.0*	
2. Assam		.	4.0	6.1	..	..	13.8	15.2	29.0	..	17.7	
3. Bihar		0.4	2.6	3.0	7.4	10.4	25.0	11.1	
4. Bombay		.	4.9	5.6	8.6	9.0	28.1	17.4	45.5	59.2	16.7	
5. Madhya Pradesh		.	10.5	10.7	10.6	14.9	46.7	20.5	67.2	103.0	103.0	
6. Madras		.	1.5	1.8	3.3	2.1	8.7	1.2	9.9	9.2	7.1	
7. Orissa		.	13.1	14.4	8.6	11.9	48.0	11.1	59.1	116.9	41.4	
8. Punjab		.	4.7	5.9	5.0	5.7	21.3	5.3	26.6*	27.6	32.4	
9. Uttar Pradesh		.	6.7	6.9	6.9	6.9	27.4	9.0	36.4	48.1	46.6	
10. West Bengal		.	53.4	52.5	54.5	56.1	216.8	72.1	288.9	301.5	309.0	
		.	5.8	4.8	5.0	28.3	43.9	67.1	74.3	33.1		
* Includes relieves amounting to Rs. 2,000 lakhs, financed from the proceeds of the Plan Bloom Cess Fund.												

* Includes schemes amounting to Rs. 2,000 lakhs, financed from the proceeds of the Hunoom Cess Fund.

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PROGRESS OF DEVELOPMENT EXPENDITURE

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Progress of Development Expenditure
12. OTHER INDUSTRIES (Including Scientific & Industrial Research & Mineral Development)
 (Rs. lakhs)

	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 (Col. 6 + Col. 7)	1952 Plan Provision	First Plan including Adjustments	Remarks
	2	3	4	5	6	7	8	9	10	11
I										
1. Centre										
	663.5	545.1	756.4	732.8	2697.8	1563.0	4260.8	13171.4	12130.4	
II. States:										
1. Andhra	8.6	8.3	8.2	9.2	34.3	1.7	36.0	..	62.1	
2. Assam	..	..	..	..	..	..	..	..	..
3. Bihar	2.0	8.1	5.6	27.3	43.0	15.4	58.4	60.0	78.8	
4. Bombay	2.7	3.1	33.2	2.6	41.6	3.2	44.8	250.6	250.6	
5. Madhya Pradesh	65.4	25.0	98.8	85.1	274.3	37.8	312.1	226.2	287.3	
6. Madras	31.3	24.2	22.8	13.6	91.9	20.7	112.6	85.1	128.1	
7. Orissa	6.2	13.0	13.6	11.5	44.3	37.4	81.7	65.3	93.9	
8. Punjab	2.2	2.0	1.5	1.9	7.6	1.9	9.5	15.5	10.1	
9. Uttar Pradesh	52.6	60.4	93.1	60.3	266.4	78.7	345.1	280.7	325.0	
10. West Bengal	6.8	7.7	38.1	..	52.6	..	52.6	42.4	81.8	

TOTAL : Part 'A' States										
11. Hyderabad	177.8	151.8	314.9	211.5	856.0	196.8	1052.8	1025.8	1317.7	
12. Madhya Pradesh	70.7	47.4	44.1	22.7	184.9	..	184.9	268.7	268.7	
13. Mysore . . . . .	..	0.2	0.5	0.5	1.2	0.8	2.0	5.0	4.0	
14. Pepsu . . . . .	..	..	..	12.4	12.4	39.8	52.2	34.8	97.8	
15. Rajasthan	2.0	1.9	4.0	10.0*	17.8	11.8*	29.6	27.3	27.2	
16. Saurashtra . . . . .	..	..	..	..	..	..	..	..	..
17. Travancore-Cochin	0.4	0.1	..	..	0.5	..	0.5	0.9	0.9	
TOTAL : Part 'B' States										
18. Jammu and Kashmir**	76.3	58.7	54.8	48.5	238.3	56.4	294.7	352.5	421.4	
19. Ajmer . . . . .	..	..	..	..	..	..	..	43.8	..	
20. Bhopal . . . . .	..	..	..	..	..	..	..	..	..
21. Coorg . . . . .	..	..	..	..	..	..	..	..	..
22. Delhi . . . . .	..	..	..	..	..	..	..	..	..
23. Himachal Pradesh . . . . .	..	..	..	..	..	..	..	..	..
24. Kutch . . . . .	..	..	..	..	..	..	..	..	1.5	
25. Manipur . . . . .	..	..	..	..	..	..	..	..	..
26. Tripura . . . . .	..	..	..	..	..	..	..	..	..
27. Vindhya Pradesh . . . . .	..	..	..	..	..	..	..	..	..
TOTAL : Part 'C' States										
	..	..	..	..	..	..	..	..	..	1.5

*Inclusive of Cottage Industries.

**Included under Cottage Industries except for Col. 9

	(Rs. lakhs)									
	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 (Col. 6 + Col. 7)	1952 Plan Provision	1952 Plan including Adjustments	Remarks
I	2	3	4	5	6	7	8	9	10	11
TOTAL : Part 'A', Part 'B' & Part 'C', States (including Jammu and Kashmir)	254.1	210.5	369.7	260.0	1094.3	253.2	1347.5	1422.1	1740.6	
Andaman and Nicobar Islands	..	..	..	..	..	..	..	..	..
Pondicherry	..	..	..	..	..	..	..	..	..
N.E.F.A.	..	..	..	..	..	..	..	..	..
TOTAL : Other Territories	..	..	..	..	..	253.2	1347.5	1422.1	1740.6	
TOTAL : States	254.1	210.5	369.7	260.0	1094.3	1816.2	5608.3	14593.5	13871.0	
GRAND TOTAL : Centre and States	917.6	755.6	1126.1	992.8	3792.1					

Progress of Development Expenditure

13. RAILWAYS

(Rs. lakhs)										
	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1955-56 Total	1955-56 Revised Estimates	Total 1951-56 (Col. 6 + Col. 7)	1952 Plan Provi- sion	First Plan in- cluding adjustments	Remarks
1	2	3	4	5	6	7	8	9	10	11
Centre	4086.0	3018.0	3421.0	6621.0	17146.0	9561.0	26707.0	25000.0	26707.0	

Progress of Development Expenditure

14. ROADS

(Rs. lakhs)

	1	2	3	4	5	6	7	8	9	10	11
		1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 Total (Col. 6 + Col. 7)	1952 Plan Provision	First Plan including adjustments	Remarks
I. Centre	.	383.8	414.8	581.2	651.8	2031.6	1422.7	3454.3	3124.0	4200.0	
II. States :											
1. Andhra	.	88.1	53.2	35.0	25.7	202.0	20.5	222.5	..	224.2	
2. Assam	.	2.4	15.9	55.7	77.4	151.4	123.2	274.6	213.0	265.0	
3. Bihar	.	202.1	202.4	115.4	185.2	705.1	384.0	1089.1	800.0	1075.0	
4. Bombay	.	173.2	398.5	534.2	641.7	1747.6	692.5	2440.1	1163.6	1163.6	
5. Madhya Pradesh	.	45.2	44.6	41.0	38.8	169.6	35.9	205.5	200.0	217.8	
6. Madras	.	92.7	72.9	48.8	25.6	240.0	57.4	297.4	500.0	357.6	
7. Orissa	.	17.7	24.4	40.7	60.3	143.1	76.8	219.9	200.0	228.9	
8. Punjab	.	21.3	22.8	54.7	113.9	212.7	143.6	356.3	75.1	383.7	
9. Uttar Pradesh	.	101.3	106.2	106.4	111.8	425.7	116.2	541.9	522.2	602.4	
10. West Bengal	.	212.6	251.4	347.5	227.1	1038.6	330.1	1368.7	1385.1	1400.6	
TOTAL: Part 'A' States	.	956.6	1192.3	1379.4	1597.5	5035.8	1980.2	7016.0	5019.0	5918.8	

11. Hyderabad	28.7	17.4	26.9	37.6	110.6	22.9	133.5	128.6	247.6
12. Madhya Bharat	15.2	31.2	32.8	47.8	127.0	93.9	220.9	189.0	286.3
13. Mysore	37.5	60.8	102.9	12.4	213.6	37.0	250.6	320.1	334.1
14. Pepsu	6.6	23.7	32.4	53.5	116.2	75.6	191.8	95.1	195.2
15. Rajasthan	15.5	38.4	105.3	169.2	328.4	195.8	524.2	400.0	550.0
16. Saurashtra	24.5	69.0	43.3	97.0	233.8	194.6	428.4	300.0	400.0
17. Travancore-Cochin	17.7	43.1	51.9	66.5	179.2	85.2	264.4	150.0	175.0
TOTAL : Part 'B' States	145.7	233.6	395.5	484.0	1308.8	705.0	2013.8	1582.8	2188.2
18. Jammu and Kashmir	9.0	14.2	45.8	76.4	145.4	110.3	255.7	494.4	255.0
19. Ajmer	0.6	1.2	3.2	6.2	11.2	10.5	21.7	15.9	15.9
20. Bhopal	2.8	5.1	10.6	14.6	33.1	9.1	42.2	40.0	50.5
21. Coorg	2.3	0.9	5.4	8.7	17.3	12.7	30.0	20.0	25.0
22. Delhi	0.5	2.0	6.7	7.6	16.8	6.0	22.8	25.0	25.0
23. Himachal Pradesh	9.6	26.4	67.5	41.1	144.6	74.8	219.4	133.0	235.0
24. Kutch	4.8	15.7	5.9	7.0	33.4	13.9	47.3	58.3	58.3
25. Manipur	..	11.6	13.7	14.1	39.4	15.9	55.3	81.3	81.3
26. Tripura	3.7	9.9	15.0	15.0	43.6	29.3	72.9	128.0	128.0
27. Vindhya Pradesh	12.2	10.2	13.8	29.3	65.5	38.9	104.4	125.9	125.9

		(Rs. lakhs)									
		1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1955-56 Total	1955-56 Revised Estimates	1956-57 (Col. 6 + Col. 7)	1957-58 Provision	First Plan including adjustments	
I	II	2	3	4	5	6	7	8	9	10	11
TOTAL : Part 'C' States	.	36.5	83.0	147.8	143.6	404.9	211.1	616.0	627.4	744.9	
TOTAL : Part 'A', Part 'B', and Part 'C' States (including Jammu and Kashmir)	.	1147.8	1573.1	1962.5	2211.5	6894.9	3006.6	9901.5	7763.6	9106.9	
Andaman and Nicobar Islands	
Pondicherry	0.8	0.8	10.0	10.8	..	22.8	
N.E.F.A.	.	11.7	8.2	18.5	17.6	56.0	24.6	80.6	135.0	185.0	
TOTAL: Other Territories	.	11.7	8.2	18.5	18.4	56.8	34.6	91.4	135.0	207.8	
TOTAL: States	.	1159.5	1581.3	1981.0	2229.9	6951.7	3041.2	9992.9	7898.6	9314.7	
GRAND TOTAL: Centre and States		1543.3	1996.1	2562.2	2881.7	8983.3	4463.9	13447.2	11022.6	13314.7	

Progress of Development Expenditure

15. ROAD TRANSPORT

(Rs. Lakhs)

I	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1955-56 Total	1955-56 Revised Estimates	1956-57 Total (Col. 6 + Col. 7)	1957 Plan provision	1958 10	1959 11	First Plan Remarks including adjust- ments
	2	3	4	5	6	7	8	9	10	11	
I. Centre	38.3	18.8	52.2	52.9	162.2	32.9	195.1	*	276.0		
II. States :											
1. Andhra . . . . .	..	..	..	..	..	..	..	..	..	..	..
2. Assam	8.9	9.4	16.1	11.2	45.6	29.4	75.0	31.9	62.1		
3. Bihar . . . . .	..	..	..	..	..	..	..	..	..	..	..
4. Bombay . . . . .	..	166.3	112.6	155.5	434.4	100.0	534.4	200.0	400.0		
5. Madhya Pradesh . . . . .	..	..	..	..	..	..	..	..	..	..	..
6. Madras . . . . .	..	..	..	..	..	..	..	..	..	..	..
7. Orissa	2.2	12.6	10.0	13.3	38.1	11.1	49.2	20.0	48.1		
8. Punjab . . . . .	..	..	..	..	..	..	..	..	..	..	..
9. Uttar Pradesh	25.6	30.9	16.8	39.8	113.1	20.5	133.6	120.0	130.0		
10. West Bengal	34.0	16.8	35.9	42.0	128.7	41.8	170.5	190.5	170.4		

*The 1952 Plan provision of Rs. 216 lakhs for Delhi Transport Service is shown under the Plan of Delhi State.

(Rs. lakhs)

I	2	3	4	5	6	7	8	9	10	11	Remarks
TOTAL : Part 'A' States											
11. Hyderabad	70.7	236.0	191.4	261.8	759.9	202.8	962.7	562.4	810.6		
12. Madhya Bharat	..	..	..	..	..	..	..	..	..	..
13. Mysore	..	..	..	..	..	..	..	..	..	..
14. Pepsu	..	..	..	..	..	..	..	..	..	..
15. Rajasthan	..	..	..	..	..	..	..	..	..	..
16. Saurashtra	0.3	0.9	..	3.2	4.4	..	4.4	53.0	7.1	7.1	
17. Travancore-Cochin	4.9	8.0	14.0	16.6	43.5	2.9	46.4	42.0	42.0	42.0	
TOTAL : Part 'B' States.											
18. Jammu and Kashmir	5.2	8.9	14.0	19.8	47.9	2.9	50.8	96.0	50.1	50.1	
19. Ajmer	..	..	..	..	..	..	..	..	..	..
20. Bhopal	..	..	..	..	..	..	..	..	..	..
21. Coorg	..	..	0.5	1.0	1.5	1.6	3.1	..	2.0	2.0	
22. Delhi	..	..	..	..	..	..	..	216.0	..	..
23. Himachal Pradesh	..	0.6	2.2	7.9	10.7	6.7	17.4	12.0	17.1	17.1	

TOTAL : Part 'A' States										
11. Hyderabad	0.2	0.4	6.7	7.9	15.2	20.4	35.8	26.0	26.0	26.0
12. Madhya Bharat	..	..	..	..	..	..	..	..	..	..
13. Mysore	..	..	..	..	..	..	..	..	..	..
14. Pepsu	..	..	..	..	..	..	..	..	..	..
15. Rajasthan	..	..	..	..	..	..	..	..	..	..
16. Saurashtra	..	..	..	..	..	..	..	..	..	..
17. Travancore-Cochin	15.3	11.4	9.8	17.0	53.5	32.4	85.9	33.0	33.0	116.2
TOTAL : Part B States										
18. Jammu and Kashmir	1.9	1.3	3.5	3.4	10.1	6.5	16.6	30.0	30.0	30.0
19. Almer	17.2	12.7	13.3	20.4	63.6	38.9	102.5	63.0	63.0	146.2
20. Bhopal	..	..	..	..	..	..	..	..	..	..
21. Coorg	..	..	..	..	..	..	..	..	..	..
22. Delhi	..	..	..	..	..	..	..	..	..	..
23. Himachal Pradesh	..	..	..	..	..	..	..	..	..	..
24. Kutch	..	..	..	..	..	..	..	..	..	..
25. Manipur	..	..	1.3	2.6	3.9	4.5	8.4	13.4	13.4	13.4
26. Tripura	..	..	..	..	..	..	..	..	..	..
27. Vindhya Pradesh	..	..	..	..	..	..	..	..	..	..
TOTAL : Part 'C' States										
	..	1.3	3.6	3.9	4.5	8.4	13.4	13.4	13.4	13.4

	(Rs. lakhs)										
	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 Total (Col. 6 + Col. 7)	1952 Plan Provision	First Plan including adjustments	Remarks	
	2	3	4	5	6	7	8	9	10	11	
TOTAL : Part 'A', Part 'B', & Part 'C' States . (including Jammu and Kashmir)	17.4	13.1	21.3	30.9	82.7	63.8	146.5	102.4	185.6		
Andaman and Nicobar Islands . . . . .	..	..	..	..	..	..	..	..	..
Pondicherry . . . . .	..	..	..	..	..	..	..	..	..
N.E.F.A. . . . .	..	..	..	..	..	..	..	..	..
TOTAL : Other Territories. . . . .	..	..	..	..	..	..	..	..	..
TOTAL : States	17.4	13.1	21.3	30.9	82.7	63.8	146.5	102.4	185.6		
GRAND TOTAL : Centre and States	120.2	112.9	546.7	858.79	1668.7	1088.7	2757.4	3308.8	3690.6		

(e) Actuals for the year 1955-56 relating to the Plan of Ports and Harbours have been recently received reducing the total First Plan expenditure against this head to Rs. 25 crores.

Progress of Development Expenditure

17. SHIPPING

(Rs. lakhs)

	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 Total (Col. 6 + Col. 7)	1952 Plan Provision	First Plan including adjustments	Remarks
1	2	3	4	5	6	7	8	9	10	11
Centre	193.5	107.4	342.6	615.8	1259.3	611.7	1871.0	1805.8	2630.0	

Progress of Development Expenditure

18. POSTS AND TELEGRAPHS

(Rs. lakhs)

	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 Total (Col. 6 + Col. 7)	1952 Plan Provision	First Plan including adjustments	Remarks
1	2	3	4	5	6	7	8	9	10	11
Centre	. . . 553.0	617.0	821.0	968.0	2959.0	998.0	3957.0	5000.0	5000.0	

Progress of Development Expenditure

19. BROADCASTING

(Rs. lakhs)

	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 Total (Col. 6 + Col. 7)	1952 Plan Provision	1952 Plan including adjustments	Remarks
I	2	3	4	5	6	7	8	9	10	11
Centre	22.8	10.8	49.5	52.3	135.4	131.7	267.1	27.0	352.0	494.0

Progress of Development Expenditure
20. EDUCATION

(Rs. lakhs)

	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 Total (Col. 6 + Col. 7)	1952 Plan Provision	First Plan including adjustments	Remarks
I. Centres	2	3	4	5	6	7	8	9	10	11
I. States:										
1. Andhra	36.9	41.8	41.2	52.8	172.7	88.7	261.4	..	325.7	
2. Assam	7.0	6.4	21.3	31.6	66.3	45.5	111.8	89.9	101.1	
3. Bihar	130.4	100.6	125.9	184.6	541.5	221.9	763.4	570.4	592.8	
4. Bombay	816.6	897.5	930.2	952.6	3596.9	1040.1	4637.0	4632.2	4632.0	
5. Madhya Pradesh	108.1	115.2	184.6	205.2	613.1	286.4	899.5	1079.3	1062.1	
6. Madras	43.3	56.5	54.6	87.7	242.1	159.9	402.0	800.0	493.8	
7. Orissa	13.1	25.9	36.4	33.1	108.5	45.5	154.0	179.5	172.3	
8. Punjab	18.6	28.4	45.9	35.5	128.4	32.7	161.1	118.0	167.6	
9. Uttar Pradesh	302.3	323.3	366.1	393.6	1385.3	421.8	1807.1	1603.9	1783.3	
10. West Bengal	112.1	127.9	249.5	241.3	730.8	411.9	1142.7	808.1	1132.7	
TOTAL : Part 'A' States	1588.4	1723.5	2055.7	2218.0	7585.6	2754.4	10340.0	9881.3	10463.4	

11. Hyderabad	..	17.2	25.5	47.0	61.3	151.0	98.7	249.7	263.5	263.5
12. Madhya Bharat	.	2.8	12.9	17.0	42.8	75.5	90.9	166.4	200.0	161.0
13. Mysore	.	25.4	27.5	30.5	30.7	114.1	37.8	151.9	225.7	251.5
14. Pepsu	.	..	1.8	7.00	23.6	32.4	30.5	62.9	63.0	63.0
15. Rajasthan	.	40.8	54.7	49.6	58.8	203.9	52.3	256.2	263.5	273.5
16. Saurashtra	.	12.8	16.1	25.0	25.7	70.6	76.9	159.2	164.9	164.9
17. Travancore-Cochin	.	0.8	5.9	4.3	5.6	16.6	9.7	26.3	20.0	24.0
TOTAL : Part 'R' States	.	99.8	144.4	180.4	248.5	673.1	399.5	1072.6	1200.6	1201.4
18. Jammu and Kashmir	.	7.1	2.5	1.1	13.3	24.0	22.8	46.8	46.0	66.1
19. Ajmer	.	..	..	..	1.0	1.0	12.6	13.6	15.0	15.0
20. Bhopal	.	0.7	1.8	18.0	25.6	46.1	35.4	81.5	30.0	85.4
21. Coorg	.	3.6	3.4	2.3	1.2	10.5	1.3	11.8	10.0	10.0
22. Delhi	.	36.8	45.6	50.8	82.5	215.7	122.8	338.5	259.8	338.4
23. Himachal Pradesh	.	0.4	5.4	6.5	13.4	25.7	18.0	43.7	46.7	50.0
24. Kutch	.	..	0.1	1.1	1.3	2.5	3.5	6.0	6.8	6.2
25. Manipur	.	..	1.4	3.1	4.4	8.9	6.5	15.4	17.7	17.7
26. Tripura	.	0.3	3.7	2.0	9.4	15.4	13.3	28.7	24.0	30.5
27. Vindhya Pradesh	.	4.1	6.8	14.3	38.2	63.4	40.0	103.4	100.0	100.0
TOTAL : Part 'C' States	.	45.9	68.2	98.1	177.0	389.2	253.4	642.6	510.0	653.2
TOTAL : Part 'A', Part 'B' & Part 'C' States, including Jammu and Kashmir	.	171.2	1938.6	2335.3	2656.8	8671.9	3430.1	12102.0	11616.8	12384.1

(Rs. lakhs)										
	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 (Col 6 + Col. 7)	1952 Plan Provision	First Plan in- cluding adjust- ments	Remarks
I	2	3	4	5	6	7	8	9	10	11
Andaman and Nicobar Islands	..	..	..	..	..	..	..	..	..
Pondicherry	..	..	..	1.1	1.1	14.2	15.3	..	5.5	
N.E.F.A.	3.2	3.9	3.7	3.1	13.9	5.6	19.5	48.0	61.5	
TOTAL : Other Territories	3.2	3.9	3.7	4.2	15.0	19.8	34.8	48.0	67.0	
TOTAL : States	1744.4	1942.5	2339.0	2661.0	8686.9	3449.9	12136.8	11685.9	12451.1	
GRAND TOTAL : Centre and States	1984.4	2242.5	2659.0	3651.0	10536.9	4759.9	15296.8	15587.5	17001.9	

Progress of Development Expenditure
21. MEDICAL AND PUBLIC HEALTH

(Rs. lakhs)

	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 (Col.6 + Col.7)	1952 Plan Provision	First Plan including adjust- ments	Remarks
	2	3	4	5	6	7	8	9	10	11
I										
I. Centre	12.3	16.3	239.1	532.9	800.6	582.6	1383.2	1787.4	2030.2	
II. States:										
1. Andhra	102.4	110.8	87.6	90.2	391.0	186.4	577.4		558.7	
2. Assam	30.3	31.7	31.1	28.4	121.5	63.9	185.4	191.3	227.3	
3. Bihar	130.1	99.4	109.3	191.2	550.0	390.46	940.6	599.9	1007.9	
4. Bombay	241.7	242.8	211.9	273.7	970.1	385.9	1356.0	1653.1	1903.0	
5. Madhya Pradesh	73.7	57.2	75.5	71.4	277.8	92.5	370.3	340.1	543.5	
6. Madras	89.4	187.4	95.9	102.4	475.1	272.8	747.9	1200.0	845.1	
7. Orissa	13.1	18.6	30.5	44.3	106.5	47.4	153.9	125.1	212.1	
8. Punjab	16.9	19.4	22.7	33.0	92.0	116.1	208.1	124.0	280.2	

(Rs. lakhs)												
		1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-52 Total	1955-56 Revised Estimates	1951-56 (Col. 6 - Col. 7)	1952 Plan Provision	First Plan including adjust- ments	Remarks	
I		2	3	4	5	6	7	8	9	10	11	
9.	Uttar Pradesh .	69.9	95.3	98.1	97.6	360.9	107.9	468.8	596.1	1515.4		
10.	West Bengal .	216.8	218.5	359.4	367.3	1162.0	468.5	1630.5	1514.9	1777.6		
TOTAL : Part 'A' States		1004.3	1081.1	1122.0	1299.5	4506.9	2132.0	6638.9	6350.5	8870.8		
11.	Hyderabad	15.4	14.7	20.3	29.1	79.5	43.5	123.0	205.9	284.9		
12.	Madhya Bharat	34.7	37.4	41.2	52.3	165.6	132.2	297.8	207.0	289.6		
13.	Mysore .	30.6	25.2	29.2	43.2	118.2	68.7	186.9	214.8	330.5		
14.	Pepsu .	..	12.8	39.5	64.1	116.4	81.7	198.1	142.0	226.3		
15.	Rajasthan .	25.4	21.4	22.3	53.3	122.4	111.2	233.6	217.5	290.9		
16.	Saurashtra	7.0	15.4	9.2	36.0	67.6	82.7	150.3	145.2	235.2		
17.	Travancore-Cochin .	33.9	41.5	30.0	19.2	124.6	113.8	238.4	171.5	317.0		
TOTAL : Part 'B' States .		137.0	168.4	191.7	297.2	794.3	633.8	1428.1	1303.9	1974.4		
18.	Jammu and Kashmir .	8.7	14.3	16.0	35.7	74.7	36.6	111.3	128.1	144.6		
19.	Ajmer .	3.2	4.5	6.5	9.3	23.5	19.2	42.7	38.0	38.0		
20.	Bhopal .	..	8.2	21.4	34.7	64.3	53.1	117.4	75.0	100.9		
21.	Coorg .	..	..	0.8	1.2	2.0	6.3	8.3	5.0	11.5	
22.	Delhi .	3.8	12.4	13.2	21.9	51.3	84.2	135.5	94.9	181.9		

23. Himachal Pradesh	0.4	7.7	15.7	9.9	33.7	37.5	69.4	64.0	68.5
24. Kutch	0.1	1.0	1.3	2.8	5.2	7.4	12.6	36.0	33.6
25. Manipur	..	0.3	0.9	1.1	2.3	10.4	12.7	27.0	26.0
26. Tripura	..	0.6	2.4	7.1	10.1	12.2	22.3	14.7	26.9
27. Vindhya Pradesh	..	5.0	7.2	15.7	27.9	22.3	50.2	96.0	169.8
TOTAL : Part 'C' States	7.5	39.7	69.4	103.7	220.3	250.8	471.1	450.6	657.1
TOTAL : Part 'A' Part 'B' & Part 'C' States (including Jammu and Kashmir)	1157.5	1303.5	1399.1	1736.1	5596.2	3053.2	8649.4	8233.1	11646.9
28. Andaman and Nicobar Islands	..	..	..	..	..	..	..	..	..
29. Pondicherry	..	..	..	..	..	4.7	4.7	..	14.0
30. N.E.F.A.	2.0	4.8	11.7	18.1	36.6	21.6	58.2	65.0	87.9
TOTAL : Other Territories	2.0	4.8	11.7	18.1	36.6	26.3	62.9	65.0	101.9
TOTAL : States	1159.5	1308.3	1410.8	1754.2	5632.8	3079.5	8712.3	8298.1	11748.8
GRAND TOTAL : Centre & States	1171.8	1324.6	1649.9	2387.1	6433.4	3662.1	10095.5	10085.5	13779.0

Progress of Development Expenditure

22. HOUSING

(Rs. lakhs)										
	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 (Col. 6 + Col. 7)	1952 Plan Provision	1952 Plan Including adjustments	Remarks
I	2	3	4	5	6	7	8	9	10	11
I. Centre	168.0	134.0	308.0	573.0	1183.0	1424.0	2607.0	3850.0	3850.0	
II. States:										
1. Andhra	24.1	14.8	19.7	24.2	86.8	22.1	108.9	..	113.2	
2. Assam	..	..	..	..	..	..	..	..	..
3. Bihar	5.0	20.0	28.0	20.1	73.1	24.5	97.6	100.0	100.0	
4. Bombay	1.4	32.6	14.8	0.2	49.0	0.3	49.3	77.2	77.2	
5. Madhya Pradesh	..	..	..	1.0	1.0	3.4	4.4	20.0	8.0	
6. Madras	36.7	35.5	33.6	4.6	110.4	41.6	152.0	300.1	189.6	
7. Orissa	..	..	..	..	..	..	..	..	..
8. Punjab	..	..	..	..	..	..	..	11.3	44.0	
9. Uttar Pradesh	0.1	6.7	5.7	6.5	19.0	4.1	23.1	145.2	45.6	
10. West Bengal	41.7	82.2	54.3	60.9	239.1	92.6	331.7	223.4	398.1	

PROGRESS OF DEVELOPMENT EXPENDITURE

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	(Rs. lakhs)											Remarks
	I	2	3	4	5	6	7	8	9	10	11	
	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 (Col. 6 + Col. 7)	1952 Plan Provi- sion	First Plan including adjust- ments			
TOTAL : Part 'A', Part 'B', & Part 'C', States (including Jammu and Kashmir)	116.1	203.4	168.5	146.4	634.4	234.4	868.8	1017.3	1049.2			
Andaman and Nicobar Islands	..	..	..	..	..	..	..	..	..
Pondicherry	..	..	..	..	..	..	..	..	6.0			
N.E. F.A.	..	..	..	..	..	..	..	..	..
TOTAL : Other Territories	..	..	..	..	..	..	..	..	6.0			
TOTAL : States	116.1	203.4	168.5	146.4	634.4	234.4	868.8	1017.3	1055.2			
GRAND TOTAL : Centre and States	284.1	337.4	476.5	719.4	1817.4	1658.4	3475.8	4867.3	4905.2			

* Inclusive of Housing Programme under Labour Welfare and Welfare of Backward Classes.

Core Progress Development Expenditure
Part I, P-4

24. WELFARE OF BACKWARD CLASSES

(Rs. lakhs)

	1	2	3	4	5	6	7	8	9	10	11
		1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1955-56 Total	1955-56 Revised Estimates	1956-57 Total (Col. 6 + Col 7)	1957-58 Provision	First Plan including adjustments	Remarks
I. Centre:	.	.	2.4	161.8	166.1	330.3	293.4	623.7	700.0	700.0	
II. States:											
1. Andhra	.	43.8	43.9	52.5	63.0	203.2	61.8	265.0	..	254.0	
2. Assam	.	18.3	36.4	61.1	125.4	241.2	215.0	456.2	509.6	451.9	
3. Bihar	.	32.0	27.0	30.3	64.2	153.5	82.5	236.0	160.0	141.5	
4. Bombay	.	36.8	54.6	52.9	51.7	196.0	63.2	259.2	213.6	213.7	
5. Madhya Pradesh	.	15.5	15.7	34.3	54.7	120.2	59.4	179.6	136.4	172.9	
6. Madras	.	76.7	71.6	89.7	97.3	335.3	116.8	452.1	467.6	415.8	
7. Orissa	.	14.3	19.9	22.7	33.6	90.5	55.1	145.6	116.4	111.3	
8. Punjab	0.1	0.4	0.5	..	0.5	..	2.7	
9. Uttar Pradesh	.	42.5	55.9	59.2	72.5	230.1	71.9	302.0	235.5	300.0	
10. West Bengal	.	..	3.8	0.2	9.9	13.9	13.7	27.6	8.3	31.7	
TOTAL : Part 'A' States	.	279.9	328.8	403.0	572.7	1584.4	739.4	2323.8	1847.4	2095.5	

[illegible]

(Rs. lakh)

Remarks

First Plan
including
adjustments1951-56
Total
(Col. 6
+ Col. 7)1955-56
Revised
Estimates1951-55
Total1954-55
Actuals1953-54
Actuals1952-53
Actuals1951-52
Actuals

11

10

9

8

7

6

5

4

3

2

1

TOTAL : Part 'A' Part 'B' and
Part 'C' States .
(Including Jammu and
Kashmir)

Andaman and Nicobar
Islands .

Pondicherry .

N.E.F.A. .

TOTAL : Other Territories .

TOTAL : States .

GRAND TOTAL : Centre and States

2489.7

2186.5

2654.3

832.8

1821.5

643.3

466.2

386.9

325.1

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Progress of Development Expenditure

25. REHABILITATION

(Rs. lakhs)

	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 Total (Col. 6 + Col. 7)	1952 Plan provision	First Plan including adjustments	Remarks
I	2	3	4	5	6	7	8	9	10	11
Centre	. . . . . 2618.2	. . . . . 2026.3	. . . . . 1347.4	. . . . . 1568.6	. . . . . 7560.5	. . . . . 2169.0	. . . . . 9729.5	. . . . . 8500.0	. . . . . 13570.0	

Progress of Development Expenditure
26. MISCELLANEOUS

(Rs. lakhs)											
		1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Total	1955-56 Revised Estimates	1951-56 (col. 6- col. 7)	1952 Plan Provision	First Plan Including adjustments	Remarks
I		2	3	4	5	6	7	8	9	10	11
I.	Centre	.	.	.	.	.	.	.	.	.	.
		102.1	221.0	894.9	1946.4	3164.4	2522.3	5686.7	4981.9	6869.2	
II.	States..										
1.	Andhra	.	.	.	80.0	80.0	41.0	121.0	..	121.0	
2.	Assam	.	.	.	..	..	..	..	..	..
3.	Bihar	.	14.1	75.2	..	271.3	..	271.3	..	..
4.	Bombay	.	..	..	..	..	..	..	..	..
5.	Madhya Pradesh	.	..	..	..	..	..	..	..	..
6.	Madras	.	..	..	..	..	..	..	..	..
7.	Orissa	.	0.7	0.7	0.3	2.3	0.5	2.8	3.5	3.5	
8.	Punjab	.	..	307.6	280.3	601.6	275.3	876.9	1000.0	1030.0	
9.	Uttar Pradesh	.	..	..	..	..	..	..	..	30.0	
10.	West Bengal	.	..	..	68.1	68.1	31.9	100.0	..	..
TOTAL : Part 'A' States		182.7	28.4	383.5	428.7	1023.3	348.7	1372.0	1003.5	1174.5	
11.	Hyderabad	.	..	..	..	..	..	..	..	..
12.	Madhya Bharat	.	..	..	..	..	..	..	..	..
13.	Mysore	.	..	..	49.9	49.9	71.3	121.2	..	..

ANNEXURE III

Progress of Development Expenditure States

ALL STATES

(Rs. lakhs)

Head of Development	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Actuals	1955-56 Revised Estimates	1951-56 (Col. 6+7)	1952 Original Plan Provi- sion	Plan including 'Ad- justments', 'Scarcity Area Programme', 'Power expansion fa- cilities for increasing employment oppor- tunities', 'National Water Supply & Pro- gramme', Sanitation	
									9	10
I	2	3	4	5	6	7	8	9	10	
1. Agriculture	2155.2	1841.9	1861.5	2240.9	8009.5	3299.9	11399.4	12520.0	11725.1	
2. Animal Husbandry	120.6	113.2	147.7	181.7	566.2	292.5	858.7	1037.5	109.9	
3. Dairying & Milk Supply	125.6	143.8	92.3	117.3	479.0	155.4	634.4	781.0	778.3	
4. Forests	96.1	114.9	141.6	216.7	572.3	325.6	897.9	989.4	962.3	
5. Cooperation	76.9	70.5	92.0	97.7	337.1	177.1	514.2	661.2	605.7	
6. Fisheries	43.7	35.0	34.7	46.8	160.2	79.8	240.0	414.1	288.5	
7. Rural Development	127.2	148.4	174.1	204.1	653.8	330.7	984.5	1046.6	1087.8	
I. Agriculture & Rural Development	2745.3	2467.7	2546.9	3108.2	10868.1	4661.0	15529.1	17449.8	16546.6	
1. Irrigation Projects	2569.1	3145.7	3184.1	4336.0	13231.9	5891.6	19126.5	16769.7	21293.8	
2. Power Projects	2233.2	2495.2	2850.7	2968.3	10547.4	4742.0	15289.4	12754.0	17862.7	

II. Major Irrigation & Power Projects 4803.3										
	5640.9	6034.8	7304.3	23782.3	10633.6	34415.2	29523.7	59156.5		
1. Cottage Industries . . .	130.2	145.7	228.0	672.4	334.1	1006.5	1194.0	1203.3		
2. Other Industries . . .	254.1	210.5	369.7	1094.3	253.2	1347.5	1422.1	1740.6		
III. Industries										
	384.3	536.2	538.2	488.0	1766.7	587.3	2354.0	2616.1	2943.9	
1. Roads . . .	1159.5	1581.3	1981.0	2229.9	6951.7	3041.2	9992.9	7898.6	9314.7	
2. Road Transport . . .	75.9	245.5	212.1	291.4	824.9	215.6	1040.5	896.9	890.3	
3. Ports and Harbours . . .	17.4	13.1	21.3	30.9	82.7	63.8	146.5	102.4	185.6	
IV. Transport										
	1252.8	1829.9	2214.4	2552.2	7893.3	3320.6	11179.9	8897.9	10390.6	
1. Education . . .	1744.4	1942.5	2339.0	2661.0	8686.9	3449.9	12136.8	11685.7	12451.1	
2. Medical . . .										
3. Public Health . . .	1159.5	1308.3	1410.8	1754.2	5632.8	3079.5	8712.3	8298.1	11748.8	
4. Housing . . .	116.1	203.4	168.5	146.4	634.4	234.4	868.8	1017.3	1055.2	
5. Labour & Labour Welfare . . .	28.0	28.7	38.8	124.2	48.8	173.0	299.8	301.3		
6. Welfare of Backward Classes . . .	325.1	386.9	466.2	643.3	1821.5	833.3	2654.8	2186.5	2489.7	
V. Social Services										
	3373.1	3869.8	4413.2	5243.7	16899.8	7645.9	24545.7	23487.4	28046.1	
VI. Miscellaneous (Including Andaman & Nicobar Islands)										
	193.6	39.7	420.8	535.8	1189.9	1554.6	1744.5	1531.1	1732.8	
GRAND TOTAL										
	12751.4	14214.2	16168.3	19232.2	62366.1	27403.0	89769.1	83506.0	98816.5	

Progress of Development Expenditure

I. ANDHRA

(Rs. Lakhs)

Head of Development	1	1951-52	1952-53	1953-54	1954-55	1951-55	1955-56	1951-56	9	10	Plan including 'Ad-justments', 'Scarcity Area Programme', 'Power expansion fa-cilities for increasing employment oppor-tunities', 'National Water Supply & Sanitation Program-me'
		Actuals	Actuals	Actuals	Actuals	Actuals	Revised Estimates	(Col. 6 + Col. 7)				Provi-sion
1. Agriculture	.	135.2	116.4	138.4	105.4	495.4	111.7	607.1	..	605.0	
2. Animal Husbandry	.	8.9	7.0	6.8	7.6	30.3	9.5	39.8	..	47.5	
3. Dairying & Milk Supply	.	3.4	3.3	2.4	3.4	12.5	3.8	16.3	..	15.9	
4. Forests	.	4.4	1.4	1.1	5.1	12.0	7.6	19.6	..	14.5	
5. Cooperation	.	3.5	3.3	1.5	5.1	13.4	4.7	18.1	..	25.8	
6. Fisheries	.	1.4	1.4	1.0	0.8	4.6	1.2	5.8	..	5.9	
7. Rural Development	.	16.9	11.0	16.3	..	44.2	..	44.2	..	46.1	
I. Agriculture & Rural Deve-lopment	.	173.7	143.8	167.5	127.4	612.4	138.5	750.9	..	760.7	

I. Irrigation Projects	311.2	243.0	197.4	328.5	980.1	491.4	1471.5	..	1744.3
2. Power Projects	365.0	332.0	478.0	726.0	1901.0	676.0	2577.0	..	2531.9
<i>I. Major Irrigation & Power Projects</i>									
1. Cottage Industries	576.2	575.0	675.4	1054.5	2881.1	1167.4	4048.5	..	4376.2
2. Other Industries	4.0	6.1	3.7	..	13.8	15.2	29.0	..	17.7
III. Industry	8.6	8.3	8.2	9.2	34.3	1.7	36.0	..	62.1
1. Roads	12.6	14.4	11.9	9.2	48.1	16.9	65.0	..	79.8
2. Road Transport	88.1	53.2	35.0	25.7	202.0	20.5	222.5	..	224.2
3. Ports & Harbours . . . . .	..	..	..	..	..	..	..	..	..
V. Transport . . . . .	..	..	..	..	..	..	..	..	..
1. Education	88.1	53.2	35.0	25.7	202.0	20.5	222.5	..	224.2
2. Medical	36.9	418	41.2	52.8	172.7	88.7	861.4	..	325.7
3. Public Health	16.5	14.8	21.9	26.7	79.9	23.8	103.7	..	139.6
4. Housing	85.9	96.0	65.7	63.5	311.1	162.6	473.7	..	429.1
5. Labour & Labour Welfare	24.1	18.8	19.7	24.2	86.8	22.1	108.9	..	113.2
6. Welfare of Backward Classes . . . . .	..	..	..	..	..	..	..	..	..
V. Social Services	43.8	43.9	52.5	63.0	203.2	61.8	265.0	..	254.0
Miscellaneous	207.2	215.3	201.0	230.2	853.7	359.0	1212.7	..	1251.6
GRAND TOTAL . . . . .	..	..	..	80.0	80.0	41.0	121.0	..	121.0
	1057.8	1001.7	1090.8	1527.0	4677.3	1743.3	6420.6	..	6713.5

REVIEW OF THE FIRST FIVE YEAR PLAN

Progress of Development Expenditure

2. ASSAM

Head of Development	(Rs. lakhs)									
	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1955-56 Actuals	1955-56 Revised Estimates	1951-56 (Col. 6 + Col. 7)	1952 plan provi- sion	9	10
1. Agriculture	42.1	63.7	1.2	60.2	55.5	221.5	74.8	296.3	276.1	323.5
2. Animal Husbandry	1.5	..	..	1.9	3.9	8.5	12.5	21.0	12.5	14.8
3. Dairying & Milk Supply	..	..	..	7.1	13.5	34.1	17.6	51.7	36.3	47.4
4. Forests	6.5	7.0	..	0.2	4.1	4.3	13.8	18.1	29.3	15.3
5. Cooperation	..	..	1.0	1.9	2.5	6.2	5.5	11.7	6.0	10.5
6. Fisheries	0.8	20.7	21.0	17.5	74.1	28.6	102.7	39.3	39.3	98.0
7. Rural Development	14.9	93.6	92.3	97.0	348.7	152.8	501.5	399.5	399.5	509.5
8. Agriculture and Rural Development	65.8	7.7	9.9	24.2	95.3	128.1	223.4	351.5	200.0	337.2
9. Irrigation Projects	..	..	..	..	..	..	..	..	..	..

plan including 'Ad-justments', 'Scarcity Programme', 'Area expansion fa-cilities for increasing employment oppor-tunities', 'National & Water Supply Pro-sanitation programme'

2. Power Projects . . . . .	..	0.3	8.4	31.9	40.6	96.1	136.7	83.0	199.6
II. Major Irrigation & Power Projects	0.9	8.0	32.6	127.2	168.7	319.5	488.2	283.0	536.8
1. Cottage Industries . . . . .	..	..	0.4	2.6	3.0	7.4	10.4	25.0	11.1
2. Other Industries . . . . .	..	..	..	..	..	..	..	..	..
III. Industry . . . . .	..	..	0.4	2.6	3.0	7.4	10.4	25.0	11.1
1. Roads	2.4	15.9	55.7	77.4	151.4	123.2	274.6	213.0	265.0
2. Road Transport	8.9	9.4	16.1	11.2	45.6	29.4	75.0	31.9	62.1
3. Ports and Harbours . . . . .	..	..	..	..	..	..	..	..	..
IV. Transport	11.3	25.3	71.8	88.6	197.0	153.6	349.6	244.9	327.1
1. Education	7.0	6.4	21.3	31.6	66.3	45.5	111.8	89.9	101.1
2. Medical	29.6	31.0	30.1	} 28.4	121.5	63.9	185.4	173.5	176.6
3. Public Health	0.7	0.7	1.0						
4. Housing . . . . .	..	..	..	..	..	..	..	..	..
5. Labour & Labour Welfare . . . . .	..	..	..	..	..	2.6	2.6	6.0	2.6
6. Welfare of Backward Classes. 18.3	36.4	61.1	125.4	241.2	215.0	215.0	456.2	509.0	451.8
V. Social Services	55.6	74.5	113.5	185.4	429.0	327.0	756.0	796.8	782.8
GRAND TOTAL	133.6	201.4	310.6	500.8	1146.4	959.3	205.7	1749.2	2167.3

Progress of Development Expenditure
3. BIHAR

(Rs. lakhs)

Head of Development	1	2	3	4	5	6	7	8	9	10	Plan including 'Adjustments', 'Scarcity Area Programme', 'Power expansion facilities for increasing employment opportunities', 'National Water Supply & Sanitation Programme'.
		1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Actuals	1955-56 Revised Estimates	1951-56 (Col. 6) + (Col. 7)	1952 Plan Provision		
1. Agriculture		324.1	143.6	126.9	224.0	818.6	386.2	1204.8	1284.3	1180.9	
2. Animal Husbandry		12.8	11.6	12.8	21.9	59.1	40.1	99.2	92.5	122.4	
3. Dairying & Milk Supply		0.6	0.3	0.3	2.6	3.8	1.8	5.6	1.5	5.5	
4. Forests		22.3	15.0	19.8	26.5	83.6	40.6	124.2	125.0	125.0	
5. Cooperation		5.4	6.7	7.0	8.0	27.1	12.4	39.5	39.0	39.0	
6. Fisheries		1.4	1.3	1.4	1.5	5.6	1.7	7.3	10.6	8.6	
7. Rural Development		12.6	17.3	21.7	27.7	79.3	43.8	123.1	124.7	124.7	
I. Agriculture & Rural Development		379.2	195.8	189.9	312.2	1077.1	526.6	1603.7	1677.6	1006.1	
1. Irrigation Projects		173.4	153.9	77.0	290.9	695.2	556.8	1252.0	973.3	1215.4	

PROGRESS OF DEVELOPMENT EXPENDITURE

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2. Power Projects	80.0	150.5	142.9	165.1	538.5	410.4	948.9	708.7	979.6
II. Major Irrigation & Power Projects	253.4	304.4	219.9	456.0	1233.7	967.2	2200.9	1682.0	2195.0
1. Cottage Industries	4.9	5.6	8.6	9.0	28.1	17.4	45.5	59.2	46.7
2. Other Industries	2.0	8.1	5.6	27.3	43.0	15.4	58.4	60.0	78.8
III. Industry	6.9	13.7	14.2	36.3	71.1	32.8	103.9	119.2	125.5
1. Roads	202.1	202.4	115.4	165.2	705.1	384.0	1089.1	800.0	1075.0
2. Road Transport . . . . .	..	..	..	..	..	..	..	..	..
3. Ports & Harbours . . . . .	..	..	..	..	..	..	..	..	..
IV. Transport	202.1	202.4	115.4	165.2	705.1	384.0	1089.1	800.0	1075.0
1. Education	130.4	100.6	125.9	184.6	541.5	221.9	763.4	570.4	592.8
2. Medical	110.1	53.5	53.6	77.6	294.8	206.1	500.9	403.9	521.9
3. Public Health	40.0	45.9	55.7	113.6	255.2	184.7	439.7	196.0	483.0
4. Housing	5.0	20.0	28.0	20.1	73.1	24.5	97.6	100.0	100.0
5. Labour & Labour Welfare	0.7	1.0	2.8	7.1	11.6	8.2	19.8	20.0	23.3
6. Welfare of Backward Classes	32.0	27.0	30.3	64.2	153.5	82.5	236.0	160.0	141.4
V. Social Services	318.2	248.0	296.3	467.2	1339.7	721.7	2057.4	1450.3	1865.4
Miscellaneous	182.0	14.1	75.2	..	271.3	..	271.3	*	..
GRAND TOTAL	1341.8	978.4	910.9	1456.9	4688.0	2638.3	7326.3	5729.1	6867.0

*Distributed under the various heads of development.

2. Power Projects	253.0	288.9	223.0	118.0	882.9	215.0	1097.9	1043.0	1348.1
II. Major Irrigation and Power Projects	521.6	544.5	745.3	716.7	2528.1	995.2	3523.3	3312.0	1204.4
1. Cottage Industries	10.5	10.7	10.6	14.9	46.7	20.5	67.2	103.1	103.0
2. Other Industries	2.7	3.1	33.2	2.6	41.6	3.2	44.8	250.6	250.6
III. Industry	13.3	13.8	43.8	17.5	88.3	23.7	112.0	353.7	353.6
1. Roads	173.2	398.5	534.2	641.7	1747.6	692.5	2440.1	1163.6	1163.6
2. Road Transport . . . . .	..	166.3	112.6	155.5	434.4	100.0	534.4	200.0	400.0
3. Ports and Harbours	0.2	0.4	6.7	7.9	15.2	20.4	35.6	25.0	25.0
IV. Transport	173.4	565.2	653.5	805.1	2197.2	812.9	3010.1	1388.6	1588.6
1. Education	816.6	897.5	930.2	952.6	3596.9	1040.1	4637.0	4632.2	4632.0
2. Medical	114.4	86.4	81.8	273.7	970.1	385.9	1356.0	536.4	536.4
3. Public Health	127.3	156.4	130.1						
4. Housing	1.4	32.6	14.8	0.2	49.0	0.3	49.3	77.2	77.2
5. Labour and Labour Welfare	8.8	9.2	5.3	6.9	30.2	7.3	37.5	141.2	141.3
6. Welfare of Backward Classes.	36.8	54.6	52.9	51.7	196.0	63.2	259.2	213.6	213.6
V. Social Services	1105.3	2136.7	1215.1	1285.1	4812.2	1496.8	6339.0	6717.3	6967.2
Miscellaneous . . . . .	..	..	..	..	..	..	..	..	..
GRAND TOTAL	225.8	284.4	3228.8	3348.3	11672.1	3947.0	15619.1	14643.5	15985.7

Progress of Development Expenditure
5. MADHYA PRADESH

(Rs. lakhs)

	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Actuals	1955-56 Revised Estimates	1951-56 (Col. 6+ Col. 7)	1952 Plan Provision	Plan including 'Ad- justments', 'Scarcity Area Programme', 'Power expansion facilities for in- creasing employment opportunities', 'Na- tional Water Supply & Sanitation Pro- gramme'
1	2	3	4	5	6	7	8	9	10
1. Agriculture	142.6	111.6	89.3	272.9	616.4	318.2	934.6	1005.5	995.9
2. Animal Husbandry	14.8	13.3	15.5	19.0	62.6	26.1	88.7	98.8	91.5
3. Dairying and Milk Supply	5.8	5.7	9.2	9.1	29.8	10.6	40.4	36.9	43.3
4. Forests	7.9	7.2	7.1	7.5	29.7	9.8	39.5	40.8	39.7
5. Cooperation	2.4	1.9	3.1	4.6	12.0	7.6	19.6	28.8	28.8
6. Fisheries	0.8	0.9	1.0	1.1	3.8	1.6	5.4	5.8	6.2
7. Rural Development	7.4	8.2	6.8	117.9	40.3	49.5	89.8	165.9	124.3
1. <i>Agriculture and Rural De-</i> <i>velopment</i>	181.7	148.8	132.0	332.1	791.6	423.4	1218.0	1382.5	1329.7
1. Irrigation Projects	10.2	2.5	42.7	93.9	149.3	112.9	262.2	308.0	334.5

2. Power Projects . . .	148.3	82.4	126.2	120.0	476.9	317.3	794.2	600.0	854.7
II. Major Irrigation and Power Projects . . .	158.5	84.9	168.9	213.9	626.2	430.2	1056.4	908.0	1189.2
I. Cottage Industries . . .	1.5	1.8	3.3	2.1	8.7	1.2	9.9	9.2	7.1
2. Other Industries . . .	65.4	25.0	98.8	85.1	274.3	37.8	312.1	226.2	287.3
III. Industry . . .	66.9	26.8	102.1	87.2	283.0	39.0	322.0	235.4	294.4
1. Roads . . .	45.2	44.6	41.0	38.8	169.6	35.9	205.5	200.0	217.8
2. Road Transport . . .	..	..	..	..	..	..	..	..	..
3. Ports and Harbours . . .	..	..	..	..	..	..	..	..	..
IV. Transport . . .	45.2	44.6	41.0	38.8	169.6	35.9	205.5	200.0	217.8
1. Education . . .	108.1	115.2	14.6	205.2	613.1	286.4	899.5	1079.3	1062.1
2. Medical . . .	64.6	45.4	44.3	44.5	198.8	64.0	262.8	267.9	280.9
3. Public Health . . .	9.1	11.8	31.2	26.9	79.0	28.5	107.5	78.2	262.6
4. Housing . . .	..	..	..	1.0	1.0	3.4	4.4	20.0	8.0
5. Labour and Labour Welfare . . .	..	..	0.1	0.1	0.2	0.2	0.4	0.5	0.4
6. Welfare of Backward Classes . . .	15.5	15.7	34.3	54.7	120.2	59.4	179.6	136.4	172.8
V. Social Services . . .	197.3	188.1	294.5	332.4	1012.3	441.9	1454.2	1582.3	1786.8
Miscellaneous . . .	..	..	..	..	..	..	..	..	..
GRAND TOTAL . . .	649.6	493.2	738.5	1004.4	2885.7	1370.4	4256.1	4308.2	4817.9

Progress of Development Expenditure
6. MADRAS

(Rs. lakhs)

Head of Development	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1955-56 Revised Estimates	1951-56 (Col. 6+ Col. 7)	1952 Plan Provision	Plan including 'Ad- justments', 'Scarcity Area Programme', 'Power expansion facilities for in- creasing employment opportunities', 'Na- tional Water Supply and Sanitation Pro- gramme'		
								8	9	10
I										
1. Agriculture	191.7	156.7	219.6	86.6	654.6	385.7	1593.7	1010.3	1593.7	902.2
- 2. Animal Husbandry	6.3	7.0	8.4	7.7	29.4	14.0	100.9	43.4	100.9	56.2
3. Dairying and Milk Supply	2.7	5.5	0.4	4.3	12.9	2.6	50.0	15.5	50.0	12.9
4. Forests	3.4	4.3	3.7	7.3	18.7	10.4	38.8	29.1	38.8	74.3
5. Cooperation	2.5	2.7	1.3	2.2	8.7	2.2	100.0	10.9	100.0	17.1
6. Fisheries	13.2	6.3	6.5	4.9	30.6	4.8	100.0	35.4	100.0	49.0
7. Rural Development	11.5	13.6	6.5	2.4	34.0	3.4	200.0	37.4	200.0	30.0
I. Agriculture and Rural De- velopment	231.3	196.1	246.1	115.4	788.9	423.1	2182.5	1212.0	2182.5	1141.7
1. Irrigation Projects	411.0	416.0	290.0	377.9	1494.9	565.3	3408.0	2060.2	3408.0	2018.5

2. Power Projects.									
II Major Irrigation and Power Projects									
I. Cottage Industries	432.0	453.0	452.0	584.1	1921.1	1146.7	3067.8	5024.0	3386.0
2 Other Industries	843.0	869.0	742.0	962.0	3416.0	1712.0	5128.0	8432.0	5404.5
III. Industry	13.1	14.4	8.6	11.9	48.0	11.1	59.1	116.9	44.4
1. Roads	31.3	24.2	22.8	13.6	91.9	20.7	112.6	85.1	128.1
2. Road Transport	44.4	38.6	31.4	25.5	139.9	31.8	171.7	202.0	172.5
3. Ports and Harbours	92.7	72.9	48.8	25.6	240.0	57.4	297.4	500.0	357.6
IV. Transport	..	..	..	..	..	..	..	..	..
1. Education	92.7	72.9	48.8	25.6	240.0	57.4	297.4	500.0	357.6
2. Medical	43.3	56.5	54.6	87.7	242.1	159.9	402.0	800.0	493.8
3. Public Health	29.9	110.6	31.9	102.4	475.1	272.8	747.9	1200.0	845.1
4. Housing	59.5	76.8	64.0	..	..	..	..	..	..
5. Labour and Labour Welfare	36.7	35.5	33.6	4.6	110.4	41.6	152.0	300.0	189.6
6. Welfare of Backward Classes	76.7	71.6	89.7	97.3	335.3	116.8	452.1	467.6	415.7
V. Social Services	246.1	351.0	273.8	292.0	1162.9	591.1	1751.0	2767.6	1944.2
Miscellaneous	..	..	..	..	..	..	..	..	..
GRAND TOTAL	1457.5	1527.6	1342.1	1420.5	5747.7	2815.4	8563.1	14084.0*	9020.5

*Plan of Composite Madras.

I. Culture and Rural Development

1. Irrigation Projects	42.9	40.2	34.9	40.4	158.4	106.9	265.3	352.9	301.6
2. Power Projects	69.5	52.0	33.6	41.7	196.8	58.7	255.5	300.0	300.0
II. Major Irrigation and Power Projects	58.6	58.6	70.9	120.2	308.3	166.4	474.7	391.0	614.6
1. Cottage Industries	128.1	110.6	104.5	161.9	505.1	225.1	730.2	691.0	914.6
2. Other Industries	4.7	5.9	5.0	5.7	21.3	5.3	26.6	27.6	32.4
III. Industry	6.2	13.0	13.6	11.5	44.3	37.4	81.7	65.3	93.9
1. Roads	10.9	18.9	18.6	17.2	65.6	42.7	108.3	92.9	126.3
2. Road Transport	17.7	24.4	40.7	60.3	143.1	76.8	219.9	200.0	228.9
3. Ports and Harbours	2.2	12.6	10.0	13.3	38.1	11.1	49.2	20.0	48.1
IV. Transport	..	..	..	..	..	..	..	..	..
1. Education	19.9	37.0	50.7	73.6	181.2	87.9	269.1	221.0	1.0
2. Medical	13.1	25.9	36.4	33.1	108.5	45.5	154.0	179.5	172.3
3. Public Health	7.6	7.6	10.5	11.4	37.1	47.4	153.9	78.7	58.1
4. Housing	5.5	11.0	20.0	32.9	69.4	..	..	46.4	154.0
5. Labour & Labour Welfare	..	..	..	..	..	..	..	..	..
6. Welfare of Backward Classes	0.2	0.3	0.5	0.6	1.6	0.6	2.2	1.9	3.6
V. Social Services	14.3	19.9	22.7	33.6	90.5	55.1	145.6	116.4	111.3
Miscellaneous	40.7	64.7	90.1	111.6	307.1	148.6	455.7	422.9	499.3
GRAND TOTAL	0.7	0.6	0.7	0.3	2.3	0.5	2.8	3.5	3.5
	243.2	272.0	299.5	405.0	1219.7	611.7	1831.4	1784.2	2123.3

REVIEW OF THE FIRST FIVE YEAR PLAN

Progress of Development Expenditure
8. PUNJAB

Head of Development	(Rs. lakhs)									
	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Actuals	1955-56 Revised Estimates	1951-56 (Col. 6 + Col. 7)	1952 Plan Provision	Plan including 'Adjustments', 'Scarcity Area Programme', 'Power expansion facilities for increasing employment opportunities', 'National Water Supply and Sanitation Programme',	
I	2	3	4	5	6	7	8	9	10	
1. Agriculture										
2. Animal Husbandry	64.0	65.5	44.2	81.0	254.7	105.5	360.2	210.7	292.7	
3. Dairying & Milk Supply	3.4	3.5	3.9	4.4	15.2	4.9	20.1	22.0	20.7	
4. Forests	..	..	1.7	2.8	4.5	..	4.5	..	9.4	
5. Cooperation	11.4	11.4	11.3	11.1	45.2	12.3	57.5	18.0	60.4	
6. Fisheries	3.2	3.4	13.8	6.7	27.1	1.7	28.8	11.8	33.8	
7. Rural Development	..	..	..	0.1	0.1	0.1	0.2	..	0.4	
	..	8.0	22.8	17.4	48.2	14.4	62.6	..	71.4	

I. Agriculture and Rural Development

1. Irrigation Projects	82.0	91.8	97.7	123.5	395.0	138.9	533.9	262.5	488.8
2. Power Projects	77.0	84.8	51.8	96.8	309.9	61.9	371.8	326.2	438.0

II. Major Irrigation and Power Projects

1. Cottage Industries	120.3	136.6	190.6	260.2	707.9	288.0	995.9	364.4	999.9
2. Other Industries	6.7	6.9	6.9	6.9	27.4	9.0	26.4	48.1	46.6

III. Industry

1. Roads	8.9	8.9	8.4	3.8	7.6	1.9	9.5	15.5	10.1
2. Road Transport	21.3	22.8	54.7	113.9	35.0	10.9	15.9	63.6	56.7
3. Ports and Harbours	..	..	..	..	212.7	143.6	356.3	75.1	383.7

IV. Transport

1. Education	21.3	22.8	54.7	113.9	212.7	143.6	356.3	75.1	383.7
2. Medical	18.6	28.4	45.9	35.5	128.4	32.7	161.1	118.0	167.6
3. Public Health	8.4	13.0	12.8	26.8	67.0	34.1	101.1	73.9	121.4
4. Housing	8.5	6.4	2.9	6.2	25.0	82.0	107.0	50.1	158.8
5. Labour & Labour Welfare	..	..	..	..	..	..	..	11.3	44.0
6. Welfare of Backward Classes	..	0.1	0.2	0.2	0.5	0.3	0.8	1.8	1.3

Social Services

Miscellaneous	35.5	47.9	68.9	69.1	221.4	149.1	370.5	255.1	495.8
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GRAND TOTAL

	268.0	321.7	728.1	855.8	2173.6	1005.8	3179.4	2020.7	3444.9
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Progress of Development Expenditure
9. UTTAR PRADESH

Head of Development	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Actuals	1955-56 Revised Estimates	1951-56 (Col. 6)	1952 Plan Provision (Col. 7)	(Rs. lakhs)
1. Agriculture	347.1	270.7	212.9	393.6*	1224.3	386.8*	1611.1	2045.9	1652.5
2. Animal Husbandry	12.0	15.3	24.5	21.7	73.5	26.1	99.6	134.1	137.5
3. Dairying & Milk Supply	4.1	4.3	2.4	3.5	14.3	4.9	19.2	20.6	24.1
4. Forests	12.6	22.2	29.8	38.3	102.9	35.9	138.8	165.2	141.8
5. Cooperation	25.5	25.7	24.6	25.4	101.2	29.4	130.6	130.7	130.7
6. Fisheries	0.1	0.8	1.4	0.5	2.5	0.8	3.3	6.2	6.2
7. Rural Development	..	..	..	..	..	..	..	..	..

Plan including
'Adjustments',
'Scarcity Area
Programme',
'Power
expansion
facilities for
increasing
employment
opportunities',
'National Water
Supply and
Sanitation
Programme'

I. Agriculture and Rural Development

I. Irrigation Projects	461.4	339.0	295.3	483.0	1518.7	483.9	2002.6	2352.7	2092.8
2. Power Projects	246.5	525.1	602.6	687.5	2061.7	779.3	2841.0	1912.0	3402.4
II. Major Irrigation Projects and Power Projects	225.5	325.8	458.6	387.4	1397.3	292.4	1689.7	1411.0	2341.8
1. Cottage Industries	472.0	850.9	1061.2	1074.9	3459.0	1071.7	4530.7	3323.0	5744.2
2. Other Industries	53.4	52.5	54.5	56.4	216.8	72.1	1288.9	301.5	309.0
III. Industry	52.6	60.4	93.1	60.3	266.4	78.7	345.1	280.7	325.0
1. Roads	106.0	112.9	147.6	116.7	483.2	150.8	634.0	582.2	634.0
2. Road Transport	101.3	106.2	106.4	111.8	425.7	116.2	541.9	522.2	602.4
3. Ports and Harbours	25.6	30.9	16.8	39.8	113.1	20.5	133.6	120.0	130.0
IV. Transport	..	..	..	..	..	..	..	..	..
1. Education	126.9	137.1	123.2	151.6	538.8	136.7	675.5	642.2	732.4
2. Medical	302.3	323.3	366.1	393.6	1385.3	421.8	1807.1	1603.9	1783.3
3. Public Health	50.5	61.6	61.5	97.6	360.9	107.9	468.8	350.0	363.4
4. Housing	19.4	33.7	36.6	..	..	..	..	..	..
5. Labour & Labour Welfare	0.1	6.7	5.7	6.5	19.0	4.1	23.1	145.2	45.6
6. Welfare of Backward Classes	42.5	55.9	59.2	72.5	230.1	71.9	302.0	235.5	300.0
V. Social Services	432.9	499.1	548.3	592.2	2072.5	639.9	2702.0	2682.2	3750.2
Miscellaneous	..	..	..	..	..	..	..	..	..
GRAND TOTAL	1539.2	1939.0	2175.6	2418.4	8072.2	2473.0	10545.2	9782.3	12983.6

*Includes 'Soil conservation' also

Progress of Development Expenditure
10. WEST BENGAL

REVIEW OF THE FIRST FIVE YEAR PLAN

Head of development	(Rs. lakhs)									
	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1955-56 Actuals	1955-56 Revised Estimates	1951-56 (Col. 6 + Col. 7)	1952 Plan Provision	Plan including 'Adjustments', 'Scarcity Area Programme', 'Power expansion facilities for increasing employment opportunities', 'National Water Supply and Sanitation Programme'	
I	2	3	4	5	6	7	8	9	10	10
1. Agriculture			131.1	94.4	464.6	132.2	596.8	688.1	583.9	
2. Animal Husbandry	134.5		13.8	20.9	72.2	20.4	92.6	74.7	95.9	
3. Dairying and Milk Supply	15.5		11.9	8.8	20.7	24.3	45.0	50.0	45.0	
4. Forests			6.8	12.2	35.5	44.6	80.1	78.8	63.7	
5. Cooperation										
6. Fisheries										
7. Rural Development	13.3		13.2	9.6	44.7	19.4	64.1	154.5	72.9	
I. Agriculture and Rural Develop- ment			1.9	5.3	7.4	1.1	8.5	3.0	9.1	
I. Irrigation Projects	170.9	167.2	156.8	150.2	645.1	242.0	887.1	1049.1	870.5	
	190.1	302.4	321.6	231.4	1045.5	374.21	1419.7	1537.8	1489.5	

2. Power Projects									
II. Major Irrigation and Power Projects									
	25.0	27.7	24.0	22.5	99.2	157.4	256.6	75.8	259.3
I. Cottage Industries	215.1	330.1	345.6	263.9	1144.7	531.6	1676.3	1613.6	1748.8
II. Other Industries	5.8	4.8	5.0	28.3	43.9	23.5	67.4	74.3	33.1
III. Industry	6.8	7.7	38.1	..	52.6	..	52.6	42.4	81.8
I. Roads	12.6	12.5	43.1	28.3	96.5	23.5	120.0	116.7	114.9
2. Road Transport	212.6	251.4	347.5	227.1	1038.6	330.1	1368.7	1385.1	1400.6
3. Ports and Harbours	34.0	16.8	35.9	42.0	128.7	41.8	170.5	190.5	170.4
IV. Transport	..	..	..	..	..	..	..	..	..
I. Education	246.6	268.2	383.4	269.1	1167.3	371.9	1539.2	1575.6	1571.0
2. Medical	112.1	127.9	249.5	241.3	730.8	411.91	142.7	808.1	1132.7
3. Public Health	173.9	168.8	280.4	367.3	1162.0	468.5	1630.5	304.7	518.6
4. Housing	42.9	49.7	79.0	60.9	239.1	92.6	331.7	223.4	1359.1
5. Labour and Labour Welfare	41.7	82.2	54.3	..	..	..	..	..	..
6. Welfare of Backward Classes	..	..	..	..	..	..	..	..	..
V. Social Services	..	3.8	0.2	9.9	13.9	13.7	27.6	8.3	31.7
Miscellaneous (Scarcity Area Programme)	370.6	432.4	663.4	679.4	2145.8	986.7	3132.5	2555.7	3340.2
GRAND TOTAL	1015.8	1210.4	1592.3	1449.0	5267.5	2187.6	7455.1	6909.7	7645.4

Head of Development

[illegible]

I. Irrigation Projects	393.9	453.7	419.9	427.8	1695.3	462.0	2464.3	2479.0	2779.0
2. Power Projects	55.6	57.6	59.0	65.4	237.6	81.5	322.1	320.6	368.1
II. Major Irrigation and Power Projects	449.5	511.3	478.9	493.2	1932.9	553.3	2786.4	2799.6	3147.1
1. Cottage Industries	3.0	..	..	..	3.0	..	3.0	25.7	25.7
2. Other Industries	70.7	47.1	44.1	22.7	181.9	..	181.9	268.7	268.7
III. Industry	73.7	47.4	44.1	22.7	187.9	..	187.9	291.4	291.4
1. Roads	28.7	17.4	26.9	37.6	110.6	22.9	133.5	128.6	247.6
2. Road Transport	..	..	..	..	..	..	..	..	..
3. Ports and Harbours	..	..	..	..	..	..	..	..	..
IV. Transport	28.7	17.6	26.9	37.6	110.6	22.9	133.5	128.6	247.6
1. Education	17.2	25.5	47.0	61.3	151.0	98.7	249.7	263.5	263.5
2. Medical	12.3	12.3	15.9	18.8	59.3	29.3	88.6	117.7	117.7
3. Public Health	3.1	2.4	4.4	10.3	20.2	14.2	34.4	88.3	167.2
4. Housing	..	..	..	..	..	..	..	..	..
5. Labour and Labour Welfare	..	..	..	..	..	..	..	..	..
6. Welfare of Backward Classes	..	..	..	..	..	..	..	..	..
V. Social Services	32.6	40.2	67.3	90.4	230.5	142.2	372.7	469.4	548.4
Miscellaneous	..	..	..	..	..	..	..	..	..
GRAND TOTAL	646.0	648.7	650.8	691.8	2737.3	811.2	3148.5	4155.0	4700.5

Progress of Development Expenditure
12. MADHYA BHARAT

(Rs. lakhs)										
Plan including 'Adjustments', 'Scarcity Area Programme,' 'Power expansion facilities for increasing employment opportunities,' 'National Water Supply and Sanitation Programme'										
Head of Development										
1	2	3	4	5	6	7	8	9	10	
1. Agriculture	46.2	75.5	46.2	105.3	273.2	216.6	489.8	750.0	474.5	
2. Animal Husbandry	1.4	2.8	3.2	7.0	14.4	21.9	36.3	50.0	55.9	
3. Dairying and Milk Supply	..	..	..	..	..	..	..	..	..
4. Forests	0.4	4.5	4.4	15.2	24.5	19.8	43.8	50.0	48.0	
5. Cooperation	..	0.5	3.8	2.9	7.2	20.1	27.3	25.0	25.0	
6. Fisheries	0.4	0.7	1.1	2.4	4.6	2.4	7.0	10.0	7.5	
7. Rural Development	5.4	13.9	27.8	43.0	90.1	80.6	170.7	60.0	141.3	
I. Agriculture and Rural Development	53.8	97.9	86.5	175.8	411.0	360.9	774.9	915.0	752.2	

PROGRESS OF DEVELOPMENT EXPENDITURE									
I. Irrigation Projects									
2. Power Projects	32.1	23.6	32.8	33.3	121.8	103.9	225.7	328.0	289.4
II. Major Irrigation and Power Projects									
1. Cottage Industries	77.8	81.1	72.6	77.4	308.9	183.3	492.2	556.0	577.2
2. Other Industries	0.4	3.2	3.8	10.1	17.5	40.2	57.8	50.0	65.6
III. Industry									
1. Roads	..	0.2	0.5	0.5	1.2	0.8	2.0	5.0	4.0
2. Road Transport	15.2	31.2	4.3	10.6	18.7	41.0	59.7	55.0	69.6
3. Ports and harbours	..	..	32.8	47.8	127.0	93.9	220.9	189.0	286.0
IV. Transport									
1. Education	15.2	31.2	..	..	..	..	..	..	..
2. Medical	2.8	12.9	32.8	47.8	127.0	93.9	220.9	189.0	..
3. Public health	13.0	13.1	17.0	42.8	75.5	90.9	166.4	200.0	286.3
4. Housing	21.7	24.3	21.9	52.3	165.6	132.2	297.8	77.0	161.0
5. Labour and Labour Welfare	0.3	1.3	0.4	0.7	2.7	5.8	8.5	130.0	141.1
6. Welfare of Backward Classes	0.2	0.2	0.3	0.6	1.3	2.1	3.4	10.0	148.5
V. Social Services									
Miscellaneous	43.4	62.3	15.8	26.9	58.6	37.2	95.8	80.0	7.2
GRAND TOTAL	100.6	275.9	270.9	434.9	1172.3	947.7	2119.6	2242.0	2263.2

Progress of Development Expenditure
13. MYSORE

Progress of Development

13. MYSORE

(Rs. lakhs)

Head of Development	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Actuals	1955-56 Revised Estimates	1951-56 (Col. 6+ Col. 7)	1952 Plan Provision	Plan including 'Adjustments', 'Scarcity Area 'Programme', 'Power expansion facilities for increasing employment opportunities', 'National Water Supply and Sanitation', 'Programme'
	2	3	4	5	6	7	8	9	10
I									
1. Agriculture	119.4	85.6	80.8	60.4	346.2	52.3	398.5	443.0	461.1
2. Animal Husbandry	11.4	11.2	11.1	9.7	43.4	9.2	52.6	53.8	63.4
3. Dairying and Milk Supply	..	0.1	..	0.1	0.2	0.1	0.3	..	0.2
4. Forests	1.4	1.5	1.1	1.4	5.4	2.0	7.4	8.3	8.4
5. Co-operation	2.0	1.6	0.4	1.4	5.4	2.3	7.7	7.1	8.3
6. Fisheries	0.4	0.5	0.6	0.6	2.1	1.0	3.1	2.2	2.6
7. Rural Development	16.6	9.6	8.4	3.6	38.2	3.7	41.9	81.1	81.1

PROGRESS OF DEVELOPMENT EXPENDITURE

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I. Agriculture and Rural Development

1. Irrigation Projects	151.2	110.1	102.4	77.2	440.9	70.6	511.5	595.5	625.1
2. Power Projects	248.4	282.5	233.9	504.4	1568.2	549.5	1818.7	716.0	1486.0
II. Major Irrigation and Power Projects	198.7	283.9	250.2	138.3	871.1	175.6	1016.7	1268.0	1571.7
1. Cottage Industries	447.1	566.4	484.1	642.7	2140.3	725.1	2865.4	1934.0	3057.7
2. Other Industries	14.1	14.1	13.6	18.1	59.9	18.8	78.7	135.3	157.4
III. Industry	..	..	..	12.4	12.4	39.8	52.2	34.8	97.8
1. Roads	14.1	14.1	13.6	30.5	72.3	58.6	130.9	170.1	235.2
2. Road Transport	37.5	60.8	102.9	12.4	213.6	37.0	250.6	320.1	334.1
3. Ports and Harbours	..	..	..	..	..	..	..	..	..
IV. Transport	..	..	..	..	..	..	..	..	..
1. Education	37.5	60.8	102.9	12.4	213.6	37.0	250.6	320.1	334.1
2. Medical	25.4	27.5	30.5	30.7	114.1	37.8	131.9	225.7	251.5
3. Public Health	7.2	6.6	7.6	43.2	118.2	68.5	186.9	56.5	57.3
4. Housing	13.4	..	21.6	..	..	..	..	158.3	273.2
5. Labour and Labour Welfare	1.7	..	0.3	..	..	..	..	..	7.2
6. Welfare of Backward Classes	..	..	..	18.0	81.8	13.2	95.0	..	..
V. Social Services	20.0	19.8	19.7	..	..	..	..	100.0	106.3
Miscellaneous	67.7	74.8	79.7	92.9	314.1	119.7	433.8	590.5	695.5
GRAND TOTAL	717.6	826.2	782.7	904.6	3231.1	1082.3	4313.4	3660.2	4967.6

REVIEW OF THE FIRST FIVE YEAR PLAN

Progress of Development Expenditure
15. RAJASTHAN

Head of Development

II.2.1 of Development

(Rs. Lakhs)

FIVE YEAR PLAN

Plan including 'Adjustments', 'Scarcity Area Programme', 'Power expansion facilities for increasing employment opportunities', 'National Water Supply and Sanitation Programme'

	1	2	3	4	5	6	7	8	9	10
1. Agriculture
2. Animal Husbandry	.	9.5	26.0	36.2	43.4	115.1	57.8	172.9	109.2	215.0
3. Dairying and Milk Supply	4.0	4.0	11.7	15.7	18.3	23.7
4. Forests
5. Cooperation	3.2	5.4	12.5	17.9	21.8	21.0
6. Fisheries	.	0.1	0.6	0.4	0.6	1.7	6.0	7.7	3.0	10.0
7. Rural Development	0.2	0.2	0.2	0.4	.	.
Agriculture and Rural Development	.	11.8	28.4	40.9	53.1	134.2	89.5	223.7	167.3	284.3

PROGRESS OF DEVELOPMENT EXPENDITURE

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I. Irrigation Projects	56.1	51.3	74.7	136.8	318.9	276.0	594.9	503.6	693.3
2. Power Projects	39.6	18.5	30.7	7.2	96.0	23.9	119.9	40.8	367.1
II. Major Irrigation and Power Projects	95.7	69.8	105.4	144.0	414.9	299.9	714.8	544.4	1060.4
1. Cottage Industries	4.0	5.0	6.9	6.7	22.6	9.4	32.0	38.5	38.5
2. Other industries	..	..	..	..	..	..	..	..	..
III. Industry	4.0	5.0	6.9	6.7	22.6	9.4	32.0	38.5	38.5
1. Roads	15.5	38.4	105.3	169.2	328.4	195.8	524.2	400.0	550.0
2. Road Transport	..	..	..	..	..	..	..	1.0	1.0
3. Ports and Harbours	..	..	..	..	..	..	..	..	..
IV. Transport	15.5	38.4	105.3	169.2	328.4	195.8	524.2	401.0	551.0
1. Education	40.8	54.7	49.6	58.8	203.9	52.3	256.2	263.5	273.5
2. Medical	13.3	8.7	13.3	14.9	50.2	14.5	64.7	82.0	97.7
3. Public Health	12.1	12.7	9.0	38.4	72.2	96.7	168.9	135.5	193.2
4. Housing	3.0	..	..	..	3.0	..	3.0	2.0	2.0
5. Labour and Labour Welfare	..	..	0.1	0.6	0.7	1.3	2.0	5.0	3.8
6. Welfare of Backward Classes	5.1	6.0	6.2	10.4	27.7	16.9	44.6	42.2	42.2
V. Social Services	74.3	82.1	78.2	123.1	357.7	181.7	539.4	530.2	612.4
Miscellaneous	..	..	..	..	..	..	..	..	..
GRAND TOTAL	201.3	223.7	336.7	496.1	1257.8	776.3	2034.1	1681.4	2546.6

Note :—Figures for 'education' for 1954-55 and 1955-56 are obtained from the Development Programmes—1956-57, as the progress report for the same sector has not been furnished by the States Government so far.

Progress of Development Expenditure
16. SAURASHTRA

Head of Development	(Rs. lakhs)									
	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1955-56 Revised Estimates	1951-56 (Col. 6 & 7)	1952 Plan Provision	Plan Including 'Adjustment' 'Security Area Programme', 'Power expansion facilities for increasing employment opportunities', 'National Water Supply & Sanitation Programme'		
I	2	3	4	5	6	7	8	9	10	
1. Agriculture										
2. Animal Husbandry	104.3	79.4	10.7	18.3	272.7	75.9	348.6	212.4	212.4	
3. Dairying and Milk Supply	0.5	1.1	1.7	2.3	5.6	3.9	9.5	10.4	10.4	
4. Forests	..	..	..	..	..	..	..	1.6	1.6	
5. Cooperation	0.8	2.7	3.1	5.0	1.6	4.7	16.7	19.5	19.5	
6. Fisheries	10.2	0.3	1.1	2.1	13.7	2.3	16.0	31.8	31.8	
7. Rural Development	0.8	0.5	1.3	11.2	13.8	19.4	33.2	34.7	34.7	
	23.9	29.8	25.4	52.7	131.8	82.2	214.0	216.1	216.1	

I. Agriculture and Rural Development	140.5	113.8	73.3	121.6	449.2	188.4	637.6	526.5	526.5
1. Irrigation Projects	70.2	141.7	108.8	156.6	477.3	186.6	663.9	474.7	779.6
2. Power Projects	14.2	27.0	29.3	36.5	107.0	245.0	352.0	212.5	363.2
II. Major Irrigation and Power Projects	84.4	168.7	138.1	193.1	584.3	431.6	1015.9	687.1	1142.8
1. Cottage Industries	1.9	0.8	2.2	6.1	11.0	10.5	21.5	13.9	13.9
2. Other Industries	0.4	0.1	..	..	0.5	..	0.5	0.9	0.9
III. Industry	2.3	0.9	2.2	6.1	11.5	10.5	22.0	14.8	14.8
1. Roads	24.5	69.0	43.3	97.0	233.8	194.6	428.4	300.0	400.0
2. Road Transport	0.3	0.9	..	3.2	4.4	..	4.4	53.0	7.1
3. Ports and Harbours	15.3	11.4	9.8	17.0	53.5	32.4	85.9	33.0	116.2
IV. Transport	40.1	81.3	53.1	117.2	291.7	227.0	518.7	386.0	523.3
1. Education	12.8	16.1	25.0	25.7	79.6	79.6	159.2	164.9	164.9
2. Medical	3.3	3.8	3.8	36.0	67.6	82.7	150.3	71.4	71.4
3. Public Health	3.7	11.6	5.4	..	..	..	..	73.8	163.8
4. Housing	0.5	..	2.0	3.0	5.5	2.6	8.1	9.1	9.1
5. Labour and Labour Welfare	..	..	0.2	0.5	0.7	1.7	2.4	10.9	10.9
6. Welfare of Backward Classes	21.6	1.6	1.3	6.0	10.5	5.0	15.5	24.4	24.4
V. Social Services	21.9	32.1	37.7	71.2	163.9	171.6	335.5	354.5	444.5
Miscellaneous	5.2	5.6	5.0	14.7	30.5	26.3	56.8	72.0	72.2
GRAND TOTAL	294.4	403.4	309.4	543.9	5531.1	1055.4	5686.5	2040.9	2724.1

I. Irrigation Projects	81.3	91.7	88.0	115.7	376.7	134.8	511.5	478.0	578.0
2. Power Projects	206.2	217.2	262.2	154.9	840.5	221.7	1062.2	1035.0	1185.0
II. Major Irrigation and Power Projects	287.5	308.9	350.2	270.6	1217.2	356.5	1573.7	1513.0	1763.0
1. Cottage Industries	0.2	0.3	7.8	11.9	20.2	12.8	33.0	89.0	89.0
2. Other Industries	3.2	9.2	6.2	2.9	21.5	4.0	25.5	15.8	22.8
III. Industry	3.4	9.5	14.0	14.8	41.7	16.8	58.5	104.8	111.8
1. Roads	17.7	43.1	511.9	66.5	179.2	85.2	264.4	150.0	175.0
2. Road Transport	4.9	8.0	14.0	16.6	43.5	2.9	46.4	42.0	42.0
3. Ports and Harbours	1.9	1.3	3.5	3.4	10.1	6.5	16.6	30.0	30.0
IV. Transport	24.5	53.4	69.4	86.5	232.8	94.6	327.4	222.0	247.0
1. Electricity	0.8	5.9	4.3	5.6	16.6	9.7	26.3	20.0	24.0
2. Medical	25.2	23.5	20.3	19.2	124.6	113.8	238.4	120.0	133.0
3. Public Health	8.7	18.0	9.7					51.5	134.0
4. Housing	1.6	3.4	4.3	5.2	14.5	13.2	27.7	10.0	10.0
5. Labour & Labour Welfare	..	..	..	..	..	..	..	..	..
6. Welfare of Backward Classes	8.2	10.8	12.6	14.8	46.4	18.6	65.0	60.0	74.0
V. Social Services	44.5	61.6	51.2	44.8	202.1	155.3	357.4	261.5	425.0
Miscellaneous	..	..	..	9.3	9.3	34.8	44.1	.	11.0
GRAND TOTAL	398.9	471.2	500.2	480.8	1851.1	760.3	2611.4	2731.9	3128.4

Progress of Development Expenditure
18. JAMMU AND KASHMIR

18. JANUARY 1956

Plan including 'Adjustments', 'Scarcity Area Programme', 'Power Expansion facilities for increasing employment opportunities', 'National Water Supply & Sanitation Programme'

Head of Development	1	2	3	4	5	6	7	8	9	10
		1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Actuals	1955-56 Revised Estimates	1951-56 (Col. 6 + Col. 7)	1952 Plan Provision	
1. Agriculture	8.8	8.8	6.1	14.9	41.8	20.2
2. Animal Husbandry	0.3	9.6	9.9	9.9	19.7	15.0	24.4
3. Dairying and Milk Supply
4. Forests	.	0.5	0.5	0.9	4.8	6.7	6.8	13.6	10.0	16.8
5. Cooperation
6. Fisheries
7. Rural Development
1. Agriculture and Rural Development	.	0.5	0.5	1.2	23.2	25.4	22.8	48.2	66.8	61.4
1. Irrigation Projects	.	22.3	23.9	19.7	67.2	133.1	85.1	218.2	339.9	268.7
2. Power Projects	.	36.1	48.0	45.8	60.1	190.0	81.2	271.2	74.9	295.1

<i>II. Major Irrigation and Power Projects</i>									
	58.4	71.9	65.5	127.3	323.1	166.3	499.4	414.8	563.8
1. Cottage Industries	1.8	9.3	14.3	18.6	44.0	28.8	72.8	65.1	91.6
2. Other Industries									
<i>III. Industry.</i>									
	1.8	9.3	14.3	18.6	44.0	28.8	72.8	65.1	91.6
	9.0	14.2	45.8	76.4	145.4	110.3	255.7	494.4	255.0
1. Roads									
2. Road Transport									
3. Ports and Harbours									
<i>IV. Transport.</i>									
	9.0	14.2	45.8	76.4	145.4	119.3	235.7	494.4	255.0
1. Education	7.1	2.5	1.1	13.3	24.0	22.8	46.8	46.0	66.1
2. Medical	3.6	2.6	3.4	14.1	23.7	9.5	33.2	46.0	44.8
3. Public Health	5.1	11.7	12.6	21.6	51.0	27.1	78.1	82.1	99.8
4. Housing			5.3	2.0	7.3	10.3	17.6	12.0	13.3
5. Labour and Labour Welfare									
6. Welfare of Backward Classes									
V. Social Service	15.8	16.8	22.4	51.0	106.0	69.7	175.7	186.1	224.0
Miscellaneous	5.7	5.7	8.0	9.7	29.1	38.8	67.9	72.8	78.4
GRAND TOTAL	91.2	118.4	157.2	306.2	673.0	436.7	1109.7	1300.0	1274.2

Progress of Development Expenditure

19. AJMER

(Rs. lakhs)

Head of Development	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1955-56 Actuals	1955-56 Revised Estimates	1956-57 (Col. 6 + Col. 7)	1957-58 Plan Provision	Plan including 'Ad- justments', 'Scarcity Area Programme', 'Power expansion facilities for in- creasing employment opportunities', 'Na- tional Water Supply & Sanitation Programme'
1	2	3	4	5	6	7	8	9	10
1. Agriculture	5.2	4.5	3.7	16.4	29.8	16.1	45.9	48.4	48.4
2. Animal Husbandry	0.1	0.1	0.3	0.5	1.0	3.2	4.2	9.6	9.6
3. Dairying and Milk Supply	..	..	..	..	..	..	..	..	..
4. Forests	0.9	1.3	1.3	1.4	4.9	2.2	7.1	10.6	10.6
5. Co-operation	..	..	0.1	0.5	0.6	5.4	6.0	8.4	8.4
6. Fisheries	..	..	..	..	..	..	..	..	..
7. Rural Development	..	..	..	..	..	..	..	..	..
<i>I. Agriculture and Rural De- velopment</i>	6.2	5.9	5.4	18.8	36.3	26.9	63.2	77.0	77.0
1. Irrigation Projects	1.4	3.5	4.9	11.6	16.5	11.3	26.3
2. Power Projects	0.1	0.1

PROGRESS OF DEVELOPMENT EXPENDITURE

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II. Major Irrigation and Power Projects										11.3	16.6	11.7	4.9	3.5	1.4	36.3
1. Cottage Industries									
2. Other Industries										..	..	..	..	..	..	..	..	..
III. Industry										..	..	..	..	..	..	..	..	15.9
1. Roads										0.6	1.2	3.2	11.2	6.2	10.5	21.7	15.9	..
2. Road Transport										..	..	..	..	..	..	..	..	..
3. Ports and Harbours										..	..	..	..	..	..	..	..	15.9
IV. Transport										0.6	1.2	3.2	11.2	6.2	10.5	21.7	15.9	15.0
1. Education										..	..	..	1.0	1.0	12.6	13.6	31.9	6.1
2. Medical										2.4	3.7	5.3	20.7	9.3	13.5	34.2	6.1	..
3. Public Health										0.8	0.8	1.2	2.8	..	5.7	8.5	..	..
4. Housing										..	..	..	..	..	..	..	..	..
5. Labour and Labour Welfare										..	..	..	..	..	..	..	..	..
6. Welfare of Backward Classes										..	..	..	..	..	..	..	..	53.0
V. Social Services										3.2	4.5	6.5	24.5	10.3	31.8	56.3	..	..
Miscellaneous										..	..	..	..	..	..	..	..	..
GRAND TOTAL										10.0	11.6	16.5	76.9	38.8	80.9	157.8	157.2	182.2

NOTE :—Figures for the year 1954-55 and 1955-56 are taken from the statement received along with Development Programme 1956-57. The progress report as furnished by the State Government is incomplete and financial statements 1, 1A etc., either for the plan as a whole or for heads and sub-heads are not supplied by Ajmer Government.

Progress of Development Expenditure

20. BHOPAL

(Rs. lakhs)

Head of Development	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Actuals	1954-56 Revised Estimates	1951-56 Col. 6 + 1952 Plan Provision Col. 7)	9	10
1. Agriculture	28.8	27.4	35.5	29.6	121.3	38.4	159.7	173.0	173.0
2. Animal Husbandry	0.3	0.6	0.4	1.4	2.7	4.7	7.4	7.0	7.0
3. Dairying and Milk Supply	..	..	..	..	..	..	..	..	..
4. Forests	..	1.2	5.3	4.4	10.9	7.6	18.5	20.0	20.0
5. Co-operation	..	0.1	0.4	1.6	2.1	1.4	3.5	5.0	5.0
6. Fisheries	0.2	0.3	0.4	0.4	1.3	0.8	2.1	2.0	2.0
7. Rural Development	..	..	..	..	..	..	..	..	..
I. Agriculture and Rural Development	29.3	29.6	42.0	37.4	138.3	52.9	191.2	207.0	207.0
1. Irrigation Projects	..	..	..	0.1	0.1	3.3	3.4	..	9.7
2. Power Projects	1.9	4.8	3.0	3.2	12.9	7.6	20.5	27.9	73.9

Plan including Adjustments, Security Programme, Area Programme, Power expansion for facilities increasing employment opportunities, National Water Supply & Sanitation Programme

A. Power Projects	..	..	..	..	7.4	7.4	35.0	42.4
II. Major Irrigation & Power Project.	..	..	..	..	7.4	7.4	35.0	42.4
1. Cottage Industries	..	..	0.6	0.4	1.0	1.7	..	2.0
2. Other Industries	..	..	..	..	..	..	..	..
III. Industry	..	..	0.6	0.4	1.0	1.7	..	2.0
1. Roads	..	0.9	5.4	8.7	17.3	12.7	20.0	25.0
2. Road Transport	..	..	0.5	1.0	1.5	1.6	..	2.0
3. Ports & Harbours	..	..	..	..	..	..	..	..
IV. Transport	..	3.3	5.9	9.7	18.8	14.3	20.0	27.0
1. Education	..	3.6	2.3	1.2	10.5	1.3	10.0	10.0
2. Medical	..	..	..	1.2	1.2	6.3	5.0	6.5
3. Public Health	..	..	0.8	..	0.8	..	..	5.0
4. Housing	..	..	..	..	..	..	..	..
5. Labour & Labour Welfare	..	..	..	..	..	..	..	..
6. Welfare of Backward Classes	..	..	..	..	..	..	..	..
V. Social Services	..	3.6	3.4	2.4	12.5	7.6	15.0	21.5
GRAND TOTAL	12.3	11.5	17.9	17.1	58.8	40.0	98.8	114.3

Progress of Development Expenditure
22. DELHI

		(Rs. lakhs)									
		1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Actuals	1955-56 Revised Estimates	1951-56 (Col. 6 + Provision Col. 7)	1952 Plan	Plan including 'Adjustments' Scar- city Area 'Power gramme', facilities for increasing em- ployment opportu- nities, 'National & Water, Supply Pro- gramme', Sanitation	10
Head of Development		2	3	4	5	6	7	8	9		
I											
1. Agriculture		13.6	15.2	12.5	10.4	51.7	10.7	62.4	63.6	86.5	
2. Animal Husbandry		1.0	1.1	1.6	2.1	5.8	2.2	8.0	9.4	9.5	
3. Dairying and Milk Supply		..	..	..	..	0.1	0.1	0.2	4.9	4.9	
4. Forests		0.1	0.1	0.3	..	0.5	..	4.5	2.2	2.7	
5. Co-operation		0.2	0.8	0.5	1.4	2.9	1.6	2.1	6.3	4.7	
6. Fisheries		0.4	0.3	0.4	0.4	1.5	0.6	..	2.6	2.4	
7. Rural Development		..	..	..	..	..	..	..	..	..
I. Agriculture and Rural Development		15.3	17.5	15.3	14.4	62.5	15.2	77.7	89.0	110.7	
1. Irrigation Projects		..	..	..	..	..	..	5.0	5.0	17.0	

PROGRESS OF DEVELOPMENT EXPENDITURE

PROGRESS OF DEVELOPMENT EXPENDITURE										
	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60
2. Power Projects and II. Major Irrigation Power Projects.	..	..	..	5.0	7.3	..	..	..	..	..
1. Cottage Industries	1.1	3.7	0.2	5.0	..	..	..	..	4.8	..
2. Other Industries	..	..	..	..	5.0	7.3	..	..	25.0	..
III. Industry	..	..	..	..	..	..	..	..	..	..
1. Roads	0.5	6.7	7.6	16.8	..	..	..	..	25.0	..
2. Road Transport	..	..	..	..	..	..	..	..	..	..
3. Ports and Harbours	..	..	..	..	..	..	..	..	..	..
IV. Transport	..	..	..	..	..	..	..	..	..	..
1. Education	0.5	6.7	7.6	16.8	..	..	..	..	25.0	..
2. Medical	..	..	..	..	..	..	..	..	..	..
3. Public Health	..	..	..	..	..	..	..	..	..	..
4. Housing	..	..	..	..	..	..	..	..	..	..
5. Labour and Labour Welfare	..	..	..	..	..	..	..	..	..	..
6. Welfare of Backward Classes	..	..	..	..	..	..	..	..	..	..
V. Social Services	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..
GRAND TOTAL	56.4	78.6	89.7	126.8	351.5	233.5	585.0	748.0	678.8	..

Progress of Development Expenditure

237 HIMACHAL PRADESH

(Rs. lakhs)

Head of Development	1951-52	1952-53	1953-54	1954-55	1951-55	1955-56	1951-56	1952	Plan including 'Adjustments', 'Security Area Programme', 'Power extension facilities for increasing employment opportunities', 'National Water Supply & Sanitation Programme'.
	Actuals	Actuals	Actuals	Actuals	Actuals	Revised Estimates	(Col. 6)-(Col. 7)	Plan Provision	
1	2	3	4	5	7	6	8	9	10
1. Agriculture	0.8	2.3	2.4	5.8	11.3	17.4	28.7	28.0	34.5
2. Animal Husbandry	0.1	0.7	1.2	1.5	43.5	4.2	7.7	22.4	9.4
3. Dairying and Milk Supply	..	..	..	..	..	..	..	..	..
4. Forests	0.6	0.3	1.0	3.1	5.0	6.8	11.8	59.0	17.8
5. Cooperation	..	..	3.0	7.7	10.7	14.1	24.8	15.0	26.8
6. Fisheries	0.2	..	0.1	0.1	0.4	0.6	1.0	1.0	1.5
7. Rural Development	..	..	..	0.1	0.1	4.3	4.4	4.4	4.2
I. Agriculture and Rural Development	1.7	3.3	7.7	18.3	31.0	47.4	78.4	125.4	94.2
1. Irrigation Projects	..	4.0	11.2	9.8	25.0	14.3	39.3	80.0	57.0

2. Power Projects . . . . .	..	1.5	2.9	2.4	6.8	15.3	22.1	13.5	35.4
<i>If, Major Irrigation and Power Projects</i>	..	5.5	14.1	12.2	31.8	29.6	61.4	93.5	92.4
1. Cottage Industries . . . . .	..	0.1	0.5	2.6	3.2	5.7	8.9	23.0	11.2
2. Other Industries . . . . .	..	..	..	..	..	..	..	..	1.5
<i>III. Industry</i>	..	0.1	0.5	2.6	3.2	5.7	8.9	23.0	12.7
1. Roads	9.6	26.4	67.5	41.1	144.6	74.8	219.4	110.0	235.0
2. Road Transport . . . . .	..	0.6	2.2	7.9	10.7	6.7	17.4	10.0	17.1
3. Ports and Harbours . . . . .	..	..	..	..	..	..	..	..	..
<i>IV. Transport</i>	9.6	27.0	69.7	49.0	155.3	81.5	236.8	120.0	252.1
1. Education	0.4	5.4	6.5	13.4	20.7	28.0	43.7	36.7	50.0
2. Medical	0.3	3.9	5.2	9.9	30.7	30.7	69.4	18.1	24.2
3. Public Health	0.1	3.8	10.5	*	*	*	*	37.9	44.3
4. Housing . . . . .	..	..	..	..	..	..	..	..	..
5. Labour and Labour Welfare . . . . .	..	..	..	..	..	..	..	..	..
6. Welfare and Backward Classes . . . . .	..	..	..	..	..	..	..	..	..
<i>V. Social Services</i>	0.8	13.1	22.2	23.3	56.4	53.3	113.1	92.7	118.5
<i>Miscellaneous . . . . .</i>	..	..	..	..	..	..	..	..	..
GRAND TOTAL	12.1	49.0	114.2	115.4	280.7	27.0	498.6	454.6	569.9

*Include under Medical.

PROGRESS OF DEVELOPMENT EXPENDITURE

I. Agriculture and Rural Development										9.0	8.4	5.1	8.4	30.9	11.0	41.9	70.8
1.	Irrigation Projects	.	.	.	.	2.6	25.5	24.1	21.0	73.2	11.8	85.0	91.0	60.5	56.3	91.0	56.3
2.	Power Projects	.	.	.	.	..	7.1	0.7	1.9	9.7	22.1	31.8	23.0	151.	151.	151.	151.
II. Major Irrigation and Power Projects																	
1.	Cottage Industries	.	.	.	.	..	..	..	..	..	..	..	..	..	..	..	..
2.	Other Industries	.	.	.	.	..	..	0.1	0.3	0.4	0.5	0.9	58.3	58	..	..	..
III. Industry																	
1.	Roads	.	.	.	.	4.8	15.7	5.9	7.0	33.4	13.9	47.3	..	..	..	..	..
2.	Road Transport	.	.	.	.	..	..	..	..	..	..	..	..	..	..	..	..
3.	Ports and Harbours	.	.	.	.	..	..	..	..	..	..	..	..	..	..	..	..
IV. Transport																	
1.	Education	.	.	.	.	..	..	0.1	0.5	0.8	2.8	7.4	12.6	26.0	26.0	10.0	..
2.	Medical	.	.	.	.	..	..	0.5	0.5	..	..	..	..	..	..	..	..
3.	Public Health	.	.	.	.	..	..	..	..	..	..	..	..	..	..	..	..
V. Social Services																	
1.	Housing	.	.	.	.	..	..	..	..	..	..	..	..	..	..	..	..
2.	Labour and Labour Welfare	.	.	.	.	..	..	..	..	..	..	..	..	..	..	..	..
3.	Welfare of Backward Classes	.	.	.	.	..	..	..	..	..	..	..	..	..	..	..	..
VI. Miscellaneous																	
GRAND TOTAL																	

Progress of Development Expenditure
25. MANIPUR

(Rs. lakhs)

	1	2	3	4	5	6	7	8	9	10
		1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1954-55 Actuals	1955-56 Revised Estimates	1951-56 (Col. 6-7)	1952 Plan Provision	Plan including 'Adjustments', 'Scar- city Area Pro- gramme', 'Power expansion facilities for increasing employment opp- ortunities', 'Na- tional Water Supply & Sanitation Programme'
Head of Development										
1. Agriculture	0.4	0.4	0.5	0.9	0.8	0.8
2. Animal Husbandry	.	..	0.1	0.3	0.3	0.6	0.8	1.4	2.5	2.5
3. Dairying and Milk Supply
4. Forests	.	..	0.2	0.6	0.8	1.6	1.1	2.7	3.0	3.0
5. Co-operation	0.4
6. Fisheries
7. Rural Development
I. Agriculture and Rural Deve- lopment	.	..	0.3	0.8	1.5	2.6	3.4	6.0	6.3	6.7
1. Irrigation Projects
2. Power Projects	.	..	0.6	0.1	0.7	1.4	8.3	9.7	12.0	12.0

II. Major Irrigation and Power Projects

	0.6	0.1	0.7	1.4	8.3	9.7	12.0	12.0
1. Cottage Industries	..	..	1.7	1.7	0.9	2.6	..	0.6
2. Other Industries	..	..	..	..	..	..	..	..
III. Industry	..	..	1.7	1.7	0.9	2.6	..	0.6
1. Roads	11.6	13.7	14.1	39.4	15.9	55.3	81.3	81.3
2. Road Transport	..	4.0	0.9	4.9	1.6	6.5	10.5	10.5
3. Ports and Harbours	..	..	..	..	..	..	..	..
IV. Transport	11.6	17.7	15.0	44.3	17.5	61.8	91.8	91.8
1. Education	1.4	3.1	4.4	8.9	6.5	15.4	17.7	17.7
2. Medical	0.3	0.4	1.1	2.3	10.4	12.7	6.0	6.0
3. Public Health	..	0.5	..	..	..	..	21.0	20.0
4. Housing	..	..	..	..	..	..	..	..
5. Labour and Labour Welfare	..	..	..	..	..	..	..	..
6. Welfare of Backward Classes	..	..	..	..	..	..	..	..
V. Social Services	1.7	4.0	5.5	11.2	16.9	28.1	44.7	43.7
Miscellaneous	..	..	..	..	..	..	..	..
GRAND TOTAL	14.2	22.6	21.4	61.2	47.0	108.2	154.8	154.8

2. Power Projects	0.3	3.7	4.5	8.5	6.6	15.1	7.0	7.0
<i>II. Major Irrigation and Power Projects</i>								
1. Cottage Industries	0.2	0.7	2.5	3.4	2.8	6.2	5.8	7.8
2. Other Industries . . . . .	..	..	..	..	..	..	..	..
<i>III. Industry</i>								
1. Roads	3.7	15.0	15.0	43.6	29.3	72.9	128.0	128.0
2. Road Transport . . . . .	..	..	..	..	..	..	..	..
3. Ports and Harbours . . . . .	..	..	..	..	..	..	..	..
<i>IV. Transport</i>								
1. Education	0.3	3.7	2.0	15.4	13.3	28.70	24.0	30.5
2. Medical . . . . .	..	0.4	2.1	5.3	10.3	18.1	11.7	20.1
3. Public Health . . . . .	..	0.2	0.3	1.8	1.9	4.2	3.0	6.8
4. Housing . . . . .	..	..	..	..	..	..	..	..
5. Labour & Labour Welfare . . . . .	..	..	..	..	..	..	..	..
6. Welfare of Backward Classes . . . . .	..	..	..	..	..	..	..	..
<i>V. Social Services</i>								
Miscellaneous . . . . .	..	..	..	..	..	..	..	..
GRAND TOTAL	4.2	15.6	25.7	43.0	88.5	73.3	161.8	226.8

Progress of Development Expenditure

27. VINDHYA PRADESH

(Rs. lakhs)

Head of Development	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1951-55 Actuals	1955-56 Revised Estimates	1955-56 (Col. 6 + Col. 7)	1952 Plan Provision	Plan including 'Adjustments', 'Sear- city Area Pro- gramme', 'Power expansion facilities for increasing employment op- portunities', 'National Water Supply and Sanitation Programme'	
									9	10
1. Agriculture	10.5	19.2	26.9	51.2	107.8	96.6	204.4	204.7	204.7	204.7
2. Animal Husbandry	0.4	0.1	1.4	2.8	4.7	4.6	9.3	12.9	12.9	12.9
3. Dairying and Milk Supply	..	..	..	0.4	0.4	0.8	1.2	1.5	1.5	1.5
4. Forests	..	3.1	4.2	4.5	11.8	7.8	19.6	22.5	22.5	22.5
5. Cooperation	..	..	1.0	1.0	2.0	1.6	3.6	3.0	3.0	3.0
6. Fisheries	..	0.1	0.2	0.7	1.0	0.8	1.8	1.2	1.2	1.2
7. Rural Development	..	..	..	..	..	..	..	..	..	..
1. Agriculture and Rural De- velopment	10.9	22.5	33.7	60.6	127.7	112.2	239.9	245.8	245.8	245.8
1. Irrigation Projects	..	..	..	..	..	..	..	..	..	..
2. Power Projects	..	0.2	0.3	8.3	8.8	37.7	46.5	50.5	50.5	72.5

PROGRESS OF DEVELOPMENT EXPENDITURE

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* Figures for Education for the years 1954-55 and 1955-56 are taken from the statement received along with Development Programme 1956-57.

Progress of Development Expenditure
ANDAMAN AND NICOBAR ISLANDS

Head of Development	(Rs. lakhs)									
	1951-52 Actuals	1952-53 Actuals	1953-54 Actuals	1954-55 Actuals	1955-56 Actuals	1955-56 Revised Estimates	1955-56 (Col. 6 & 7)	1956-57 Provision	1957-58 Provision	Plan including 'Adjustments', 'Scar- city Area Pro- gramme', 'Power expansion facilities for increasing em- ployment oppor- tunities', 'National Water Supply & Sanitation Programme'
1	2	3	4	5	6	7	8	9	10	
Miscellaneous*										
			24.3	23.5	47.8	34.7	82.5	382.8	328.8	

*For Colonisation and Land Development.

Progress of Development Expenditure

(Rs. lakhs)

29. NEFA

PROGRESS OF DEVELOPMENT EXPENDITURE

467

Plan including
Adjustments, 'Scar-
city Area Pro-
gramme', Power
expansion facilities
for increasing
employment oppor-
tunities, National
Water Supply &
Sanitation
Programme'

1951-52
Actuals

1952-53
Actuals

1953-54
Actuals

1954-55
Actuals

1955-56
Revised
Estimates

1951-56
(Col. 6 +
Col. 7)

1952 Plan
Provision

Head of Development

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1. Agriculture

2. Animal Husbandry

3. Dairying 11 Milk Supply.

4. Forests

5. Cooperation

6. Fisheries

7. Rural Development

1. Agriculture and Rural Deve-

lopment

1. Irrigation Projects

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Progress of Development Expenditure
29. NRIIA

	1	2	3	4	5	6	7	8	9	10
2. Power Projects
<i>II. Major Irrigation and Power Projects</i>										
1. Cottage Industries
2. Other Industries	1.0	2.6	3.3	6.9	4.5	11.4	..	8.9
<i>III. Industry</i>										
1. Roads	1.0	2.6	3.3	6.9	4.5	11.4	..	8.9
2. Road Transport	11.7	8.2	18.5	17.6	56.0	24.6	80.6	135.0	185.0
3. Ports and Harbours
<i>IV. Transport</i>										
1. Education	11.7	8.2	18.5	17.6	56.0	24.6	80.6	135.0	185.0
2. Medical	3.2	3.9	3.7	3.1	13.9	5.6	19.5	48.0	61.5
3. Public Health	2.0	4.8	11.7	18.1	36.6	21.6	58.2	65.0	87.9
4. Housing
5. Labour & Labour Welfare
6. Welfare of Backward Classes
17. Social Services	5.2	8.7	15.4	21.2	50.5	27.2	77.7	113.0	149.4
Miscellaneous	13.9
GRAND TOTAL	22.2	27.6	49.1	56.3	155.2	75.3	230.5	380.0	420.6

Progress of Development Expenditure
30. PONDICHERRY

I	2	3	4	5	6	7	8	9	10
<i>II. Major Irrigation and Power Projects</i>									
1. Cottage Industries	1.7	1.7	10.1	11.8	..	13.0
2. Other Industries	0.7	0.7	..	2.5
<i>III. Industry</i>									
1. Roads	0.7	0.7	..	2.5
2. Road Transport	0.8	0.8	10.0	10.8	..	22.8
3. Ports and Harbours
<i>IV. Transport</i>									
1. Education	0.8	0.8	10.0	10.8	..	22.8
2. Medical	1.1	1.1	14.2	15.3	..	5.5
3. Public Health	4.7	4.7	..	14.0
4. Housing	6.0
5. Labour and Labour Welfare
6. Welfare of Backward Classes	0.5	0.5	..	..
<i>V. Social Services</i>									
Miscellaneous	1.1	1.1	19.4	20.5	..	25.5
GRAND TOTAL	4.5	4.5	45.8	50.3	..	73.5

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Y

- Yarn, 4, 15
- Youth camps, 294

Z

- Zoological Park, Delhi, 137
- Survey of India, 265

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tute. .

IX. MOBILISATION OF RESOURCES: AN ASSESSMENT

32. In the paragraphs above we have reviewed the contribution of each major source to the financing of the plan. It is necessary now to put together the picture as a whole and to attempt an overall appraisal.

33. Briefly, the plan outlay of Rs. 1960 crores was financed as follows:—

	(Rs. crores)	Percentage of total
(a) Taxation and the surpluses of railways	752	38
(b) Market borrowings	205	10
(c) Small savings and unfunded debt.	304	16
(d) Other capital receipts.	91	5
(e) External assistance	188	10
(f) Deficit financing	420	21
	<hr/> 1,960 <hr/>	<hr/> 100 <hr/>

The pattern of financing indicated by the above table can by itself be considered reasonably satisfactory. However, when one judges the performance in relation to the further increases in developmental expenditure that have been undertaken in the second plan period and the need for a steady growth in public revenues and other resources of the public sector generally, there is less cause for satisfaction. For, it is exactly when plan expenditures rose substantially in the later stages of the plan that increasing resort to deficit financing had to be undertaken. Deficit financing is safe and useful while there is a slack in the economy and production can be increased fairly quickly by utilising idle capacity or manpower. But, once the available production capacities are being more or less fully utilised, a further stepping up of investment expenditures through deficit financing cannot but generate inflationary pressures. In other words, the considerations that govern feasibility of deficit financing are rather of a short-term character and while they warrant an expansion or a contraction of public expenditure in response to the needs of the situation, deficit financing cannot be relied on for a continuous increase in outlays year by year except within narrow limits. Such an increase can only be supported by expansion of normal budgetary

34. The importance of the role that the public sector has come to play in promoting development may be seen from the steady step-up in public expenditure over the plan period. In 1955-56 total public expenditure, revenue and capital, by the Centre and States was Rs. 1687 crores as compared to Rs. 960 crores in 1950-51—an increase of about 75 per cent. The bulk of this increase was on account of the growth of developmental expenditure which rose from Rs. 455 crores in 1950-51 to Rs. 1,053 crores in 1955-56, that is, by 132 per cent. Undoubtedly, non-developmental expenditures have also increased over the period, but it is of significance that in 1955-56 they were 37 per cent of total expenditure as compared to 53 per cent in 1950-51. These trends are summed up in the table below:—

Growth of Public Expenditure, 1950-51 to 1955-56

		(Rs. crores)					
		1950-51	1951-52	1952-53	1953-54	1954-55	1955-56 Revised Estimate
		(Accounts)					
1.	<i>Non-Developmental</i>	505	634	559	521	642	634
	(a) Revenue	476	516	522	532	547	586
	(b) Capital	29	118	27	(—) 11	95	48
2.	<i>Developmental</i>	455	506	527	601	747	1,053
	(a) Revenue	241	252	265	300	334	435
	(b) Capital	214	254	262	301	413	618
3.	<i>Total Expenditure</i>	960	1,140	1,076	1,122	1,389	1,687
	(a) Revenue	717	768	787	832	881	1,021
	(b) Capital	243	372	289	290	508	666

35. The question is to what extent the resources position adjusted itself to this emerging pattern. It will be seen from the table below that revenue receipts in 1955-56 were Rs. 967 crores as compared to Rs. 780 crores in 1950-51—an increase of 24 per cent. The growth of revenues has not been continuous. There was a big spurt in 1951-52 and a quick decline to lower levels in the subsequent two years. In 1954-55 the level of public revenue was therefore, about the same as in 1951-52 and it is only in the last year of the plan that the level of 1951-52 was substantially exceeded.

Growth of Public Receipts, 1950-51 to 1955-56

(Rs. crores)

	1950-51	1951-52	1952-53 (Accounts)	1953-54	1954-55	1955-56 Revised Estimate
1. Revenue Receipts . . .	780	907	829	837	903	967
(a) Tax	632	746	677	674	723	760
(b) Non-Tax	148	161	152	163	180	207
2. Capital Receipts	238	241	165	208	392	427
3. Total Receipts	1,018	1,148	994	1,045	1,295	1,394

Of the increases in revenue, a considerable proportion has been taken up by the increase in non-development expenditures. Thus, of the increase of Rs. 187 crores in public revenues in 1955-56 as compared to 1950-51 as much as Rs. 110 crores was absorbed in non-development expenditure, the balance left for development expenditures being therefore only Rs. 77 crores. It is also important in this context to remember that development expenditures (on revenue account) outside the plan have increased steadily in the plan period—so that of the fresh resources raised by taxation and the like, the amount available for the plan as such turns out to be even smaller.

36. A word must be said here about capital receipts. These include domestic borrowings by way of market loans, small savings and other unfunded debt and external assistance. The last one is a special category and cannot be included in an assessment of the progress made in mobilising domestic resources. A plan of development has necessarily to depend upon market borrowings to an extent, but these depend in the main on the extent to which private savers, individual and institutional, invest their savings voluntarily in Government securities. Certain incentives can, no doubt, be offered, but these again, have to be related to the other funds on private savings and the prevailing structure of interest. Beyond a point, therefore, reliance on the market borrowings makes the resources position for a development plan uncertain and carries with it the danger of potential inflation. Small savings contributions to social security funds are, however, a more secure source of funds for development, and the fullest effort is to enlarge this source. The small savings movement has led to the rural areas and to the really small saver in urban areas, and it must be emphasised that while public will have to expand progressively as development effort goes up a well-organised country-wide small savings move-

REVIEW OF THE FIRST FIVE YEAR PLAN

ment is in the conditions of an under-developed economy, a *sine qua non* of success.

37. The major problem for a developing economy, is, as the plan emphasised, to get a larger proportion of national income into the public exchequer. By the end of the plan period, no more than a small beginning can be said to have been made in this direction.

Public Revenues as percentage of National Income

	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56
1. Total revenue receipts as percentage of national income	8.1	9.1	8.4	8.0	9.4	10.0
2. Tax revenue as percentage of national income	6.6	7.5	6.9	6.4	7.5	7.9
3. Non-tax revenue as percentage of national income	1.5	1.6	1.6	1.6	1.9	2.1

As the table above shows, revenue receipts as percentage of national income increased from 8.1 per cent in 1950-51 to 10 per cent in 1955-56 and tax revenue as such went up from 6.6 per cent of national income in 1950-51 to about 7.9 per cent in 1955-56. Only by progressive enlargement of public revenues with suitable structural changes in the tax system and a reorientation of borrowing techniques can developmental programmes involving outlays much larger than in the first plan period be seen through without creating financial and economic instability.

6.2 Sale of securities held in reserve

6.3 Withdrawal from balances

APPENDIX I

Plan 1951-52 to 1955-56

(Rs. crores)

I. The size of the State Plan was increased by the following:

Financing of the First Five Year Centre and States

(i) Upward revision:

(ii) Programme of

(iii) Power and

(iv) ...

1951-52 (Accounts.)

1952-53 (Accounts.)

1953-54 (Accounts.)

1954-55 (Accounts.)

1955-56 (Accounts.)

1951-56 (Total)

1951-56—Plan

Original Revised

(Total) (Revised Estimate) (Total)

(Total) (Revised Estimate) (Total)

(Total) (Revised Estimate) (Total)

(Total) (Revised Estimate) (Total)

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(Total) (Revised Estimate) (Total)

1. Outlay on the Plan

1.1 Revenue Account

1.2 Capital Account

2. Budgetary Resources

2.1 Savings of public authorities:—

2.1 From current revenues

2.1.1 From railways

2.1.2 From railways

2.2 Private savings absorbed through:—

2.2.1 Loans from the public

2.2.2 Small savings and unfunded debt

		1951-52 Accounts	1952-53 Accounts	1953-54 Accounts	1954-55 Accounts	1951-55 (Total)	1955-56 (Revised Estimate)	1951-56—Plan (Total) Original Revised		
I		2	3	4	5	6	7	8	9	10
2.2.3	Deposits, Funds and other miscellaneous sources	(—) 41.7	(—) 45.4	91.2	35.2	39.3	40.3	79.6	132.8	
3.	Gap in resources	54.6	126.3	96.9	107.3	385.1	350.0	735.1	811.2	
4.	External Assistance	64.9	45.6	18.5	16.0	145.0	58.2	203.2	..	
4.1	Grants	4.0	12.0	17.0	15.3	48.3	49.0	97.3	..	
4.2	Loans	60.9	33.6	1.5	0.7	96.7	9.2	105.9	..	
5.	Deficit	(—) 10.3	80.7	78.4	91.3	240.1	291.8	531.9	..	
5.1	Increase in floating debt	(—) 32.5	4.6	15.2	133.3	120.6	247.4	368.0	..	
5.2	Sale of securities held in reserve	8.7	18.8	20.2	(—) 32.4	15.3	20.1	35.4	..	
5.3	Withdrawal from cash balances	13.5	57.3	43.0	(—) 9.6	104.2	24.3	128.5	..	

1. Adjustments in the size of the Plan made at various stages involved the following additions and other changes :—

	(Rs. crores)		
	Centre	States	Total
Agriculture and allied heads	8.5
Irrigation and power projects	86.3
Railways	17.1

Other transport and Communications	.	.	.	.	.	39.6	14.9	54.5
Rehabilitation	.	.	.	.	.	50.7	..	50.7
Social services	.	.	.	.	.	9.0	45.7	54.7
Flood Control	.	.	.	.	.	16.5	..	16.5
Natural calamities	.	.	.	.	.	15.0	..	15.0
Industry	.	.	.	.	.	12.1	3.3	15.4
Other heads (net)	.	.	.	.	.	(—) 11.7	2.0	(—) 9.7
Total.	.	.	.	.	.	155.8	153.2	309.0

2. The figures for deposits, funds and other miscellaneous sources include State trading transactions. Net receipts on this account have been as follows :—

			¹ (Rs. crores)		
			Centre	States	Total
1951-52 (Accounts)	.	.	(—) 11.3	(—) 29.8	(—) 41.1
1952-53 (Accounts)	.	.	19.9	19.0	38.9
1953-54 (Accounts)	.	.	27.2	22.7	49.9
1954-55 (Accounts)	.	.	(—) 65.1	18.2	(—) 46.9
1955-56 (Revised Estimate)	.	.	9.1	14.7	23.8
TOTAL	.	.	(—) 20.2	44.8	24.6

APPENDIX II

Financing of the First Five Year Plan : 1951-52 to 1955-56

CENTRE

(Rs. crores)

	1	2	3	4	5	6	7	8	1951-56—Plan	
									Original	Revised
		1951-52 (Accounts)	1952-53 (Accounts)	1953-54 (Accounts)	1954-55 (Accounts)	Total for four years 1951-55	1955-56 (Revised Estimate)	Total for five years 1951-56		
1. <i>Outlay on the Plan</i>		132.1	125.4	181.3	283.6	722.4	392.5	1114.9	1233.7	1389.5
1.1 Revenue account		4.9	7.5	16.8	30.4	59.2	58.6	117.8	N.A.	N.A.
1.2 Capital account		127.2	117.9	164.5	253.6	663.2	333.9	997.1	N.A.	N.A.
2. <i>Budgetary Resources</i>		151.6	84.1	93.0	212.5	551.2	226.4	777.6	726.0	
2.1 Savings of public authorities:—										
2.1.1 From current revenues		119.0	42.1	20.9	61.0	245.0	59.6	304.6	160.0	
2.1.2 From railways		37.7	23.5	12.8	19.5	93.5	21.9	115.4	170.0	
2.2 Private Savings absorbed through:—										
2.2.1 Loans from the public		(—)34.2	(—)0.9	(—)37.2	87.0	14.7	34.3	49.0	36.0	
2.2.2 Small savings and unfunded debt		48.6	48.7	53.0	70.5	220.8	82.8	303.6	270.0	
2.2.3 Deposits, funds and other miscellaneous sources		(—)19.5	(—)29.3	43.5	(—)17.5	(—)22.8	27.8	5.0	90.0	
Transfer of funds from the Centre to States for development purposes (Central assistance)		(—)29.1	(—)35.2	(—)57.4	(—)100.3	(—)222.0	(—)127.7	(—)349.7	(—)235.6	

APPENDIX II—*contd.*

3. The public borrowing of Rs. 87 crores shown in 1954-55 is exclusive of the States' share of Rs. 25.5 crores in the National Plan Loan floated by the Centre in that year.
4. Deposits, funds and other miscellaneous sources are inclusive of the following figures of net outlay on State trading transaction:—

(Rs. crores)				
1951-52 (Accounts)	1952-53 (Accounts)	1953-54 (Accounts)	1954-55 (Accounts)	1955-56 (Revised Estimate)
(+1)11.3	(-1)19.9	(-1)27.2	(+1)65.1	(-1)9.1
				(+1)20.2
				Total
				1951-56

5. The bulk of the amount of Rs. 46 crores shown under 'sale of securities' in 1953-54 represents proceeds of maturing securities held in the Central Government's cash balance investment account.
6. N.A.—Not available.

APPENDIX III—*contd.*

		(Rs. crores)									
		1951-52 Accounts	1952-53 Accounts	1953-54 Accounts	1954-55 Accounts	Total 4 years 1951-55	1955-56 (Revised Estimates)	1951-56 Total	Original	Revised	
I		2	3	4	5	6	7	8	9	10	
6.2	Sale of securities held in reserve	30.9	34.4	(-)-26.0	(-)-35.5	3.8	6.4	10.2	67.9		
6.3	Withdrawal from cash balance	14.4	(-)-6.3	(-)-18.6	(-)-15.1	(-)-25.6	42.4	16.8			

1. The original plan of Rs. 83.5 crores shown here is higher by about Rs. 6.8 crores than that shown in the previous Progress Reports because in this statement the plans of the Andaman & Nicobar Islands and NIEPA have been put in the State Sector. In the previous Progress Reports these territories used to be shown in the Central sector.

2. Adjustments in the size of the Plan made at various stages involved the following additions & other changes.

(i) Major irrigation projects	. . . . .	-45.2
(ii) Power projects	. . . . .	+51.1
(iii) Transport	. . . . .	+14.9
(iv) Social services	. . . . .	-45.7
(v) Others (net)	. . . . .	(-)-3.7
	TOTAL	+153.2

3. The original plans of Rs. 31.2 crores for Part 'C' and Rs. 6.8 crores for Part 'D' States were revised to Rs. 35.5 crores and Rs. 8.8 crores respectively. The expenditure incurred over 1951-56 is estimated at Rs. 28.9 crores for Part 'C' and Rs. 3.6 crores for Part 'D' States i.e., a total of Rs. 32.5 crores.

4. Deposits and other miscellaneous receipts on capital account include State trading transactions. Net receipts on this account have been as under:—

1951-52 (Accounts)	. . . . .	(Rs. crores)
		(-)-29.8

1952-53 (Accounts)	.	.	.	.	.	.	19.0
1953-54 (Accounts)	.	.	.	.	.	.	22.7
1954-55 (Accounts)	.	.	.	.	.	.	18.2
1955-56 (Revised Estimate)	.	.	.	.	.	.	14.7
TOTAL							44.8

5. Loans from the public shown for 1954-55 include the allocation of Rs. 25.5 crores to some States from the National Plan Loan proceeds.
6. Heavy fall in the balance from revenue account during 1955-56 (Revised Estimate) is largely due to negative contributions in the case of States like Andhra, Bihar, Orissa, Punjab, Hyderabad, Mysore, Pepsu and Rajasthan and very low contribution in the case of Assam, Madhya Pradesh and Uttar Pradesh. This is mainly accounted for by the abrupt rise in the developmental expenditure outside the State plans as would be seen from the following figures:

(Rs. crores)

Non-plan developmental expenditure on revenue account of Part A & B States:

1951-52	1952-53	1953-54	1954-55	1955-56
	(Accounts)	(Accounts)		(Revised Estimate)
132.4	142.4	156.9	190.8	249.4

7. The fall under 'deposits and other miscellaneous receipts on capital account' in 1955-56 (Revised Estimate) is due to large outflows under deposits and advances, disbursements of loans and advances and large repayments of loans to the Centre.